6.C Board practices

Corporate governance

Framework

Novartis is committed to effective corporate governance, and our corporate governance framework is intended to support sustainable financial performance and long-term value creation for our shareholders, patients, employees and other stakeholders based on our Values and Behaviors.

The Novartis corporate governance principles are further described in key governance documents, in particular in our Articles of Incorporation and the Regulations of the Board, the Board Committees and the Executive Committee (“Board Regulations”) (www.novartis.com/investors/company-overview/corporate-governance).

The Governance, Sustainability and Nomination Committee regularly reviews both the corporate governance principles and the key governance documents against evolving best practice standards and new developments in line with our commitment to maintaining the highest standards.

To better reflect its evolving role and responsibilities in sustainability and environmental, social and governance (ESG) matters, the Board of Directors (“Board”) amended, effective as of March 1, 2022, the Board Regulations and renamed the Governance, Nomination and Corporate Responsibilities Committee to the Governance, Sustainability and Nomination Committee (GSNC).

Governance bodies

GENERAL MEETING OF SHAREHOLDERS
Approves operating and financial review, Novartis Group consolidated financial statements, and financial statements of Novartis AG; decides appropriation of available earnings and dividend; approves compensation of Board and Executive Committee; elects Board members, Board Chair, Compensation Committee members, Independent Proxy and external auditor; adopts and modifies Articles of Incorporation.

BOARD OF DIRECTORS

AUDIT AND COMPLIANCE COMMITTEE
COMPENSATION COMMITTEE
GOVERNANCE, SUSTAINABILITY AND NOMINATION COMMITTEE
RISK COMMITTEE
SCIENCE & TECHNOLOGY COMMITTEE

Sets strategic direction of Novartis, appoints and oversees key executives, approves major transactions and investments, adopts and modifies Board Regulations.

EXTERNAL AUDITOR
Provides opinion on compliance of Novartis Group consolidated financial statements and the financial statements of Novartis AG with applicable standards and Swiss law, on compliance of the Compensation Report with applicable law, on effectiveness of internal controls over financial reporting, and limited assurance on selected performance indicators in the Novartis in Society Integrated Report.

EXECUTIVE COMMITTEE
Responsible for operational management of Novartis.
Group structure and shareholders

Group structure

Novartis AG and Group companies
Novartis AG, the Group’s holding company, is a corporation organized under Swiss law with issued registered shares and registered office at Lichtstrasse 35, CH-4056 Basel, Switzerland.

The principal subsidiaries and associated companies of the Novartis Group are shown in “Item 18. Financial Statements—Note 31. Principal Group subsidiaries and associated companies.”

Divisions and business units
Novartis has two operating divisions: Innovative Medicines (IM), which specializes in patent-protected medicines, and Sandoz1, which sells generics and biosimilars. In 2022, Novartis integrated the Pharmaceuticals and Oncology business units under the IM Division and created two separate commercial organizations with a stronger geographic focus – Innovative Medicines International and Innovative Medicines US. IM is supported by the Novartis Institutes for BioMedical Research (NIBR) and Global Drug Development (GDD). Both operating divisions are supported by Novartis Operations (which combines the former Novartis Technical Operations (NTO) and Customer & Technology Solutions (CTS) units), and corporate functions. The latter includes the newly created Strategy & Growth function, which combines corporate strategy, R&D portfolio strategy and business development. A detailed review of 2022 business results can be found in “Item 18. Financial Statements—Note 3. Segmentation of key figures 2022, 2021 and 2020.”

Shareholdings

Majority holdings in publicly traded Group companies
The Novartis Group owns 70.68% of Novartis India Ltd., with registered office in Mumbai, India, and a listing on the BSE (formerly known as the Bombay Stock Exchange) (ISIN INE234A01025, symbol: HCBA). The total market value of the 29.32% free float of Novartis India Ltd. was USD 59.0 million on December 31, 2022, using the quoted market share price at year-end. Applying this share price to all the shares of the company, the market capitalization of the whole company was USD 201.2 million, and that of the shares owned by Novartis was USD 142.2 million.

Shareholders

Significant shareholders
According to the Share Register, as of December 31, 2022, the following registered shareholders, including nominees and the American Depositary Share (ADS) depositary, held more than 2% of the total share capital, with the right to vote all their shares based on exemptions granted by the Board (see “—Item 6.C Board practices—Shareholder participation—Voting rights, restrictions and representation—Registration restrictions”).2

Shareholders registered for their own account:

<table>
<thead>
<tr>
<th>Shareholders registered for their own account:</th>
<th>% holding of share capital Dec 31, 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emasan AG, Basel</td>
<td>3.7</td>
</tr>
<tr>
<td>UBS Fund Management (Switzerland) AG, Basel</td>
<td>2.3</td>
</tr>
<tr>
<td>Credit Suisse Funds AG, Zurich</td>
<td>21</td>
</tr>
</tbody>
</table>

Shareholders registered as nominees:

<table>
<thead>
<tr>
<th>Shareholders registered as nominees:</th>
<th>% holding of share capital Dec 31, 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chase Nominees Ltd., London</td>
<td>8.4</td>
</tr>
<tr>
<td>Nortrust Nominees Ltd., London</td>
<td>3.8</td>
</tr>
<tr>
<td>The Bank of New York Mellon, New York</td>
<td>2.9</td>
</tr>
<tr>
<td>Through The Bank of New York Mellon, Everett</td>
<td>16</td>
</tr>
<tr>
<td>Through The Bank of New York Mellon, New York</td>
<td>0.9</td>
</tr>
<tr>
<td>Through The Bank of New York Mellon, SA/NV, Brussels</td>
<td>0.4</td>
</tr>
<tr>
<td>Shareholder acting as American Depositary Share (ADS) depositary:</td>
<td></td>
</tr>
<tr>
<td>JPMorgan Chase Bank, N.A., New York</td>
<td>9.4</td>
</tr>
</tbody>
</table>

1 On August 25, 2022, Novartis announced its intention to separate the Sandoz business to create a standalone company by way of a 100% spin-off, with completion expected in the second half of 2023.

2 Excluding 7.7% of the share capital held as treasury shares by Novartis AG or its fully owned subsidiaries. As of the entry into force of the revised Swiss Code of Obligations on January 1, 2023, Novartis ordinary shares held by certain Swiss foundations controlled by Novartis also no longer carry the right to vote and therefore will be treated for this calculation as treasury shares going forward.
According to a disclosure notification filed with Novartis AG, Norges Bank (Central Bank of Norway), Oslo, held 2.3% of the share capital but was not registered in the Share Register as of December 31, 2022.

According to a disclosure notification filed with Novartis AG and the SIX Swiss Exchange Regulation AG, BlackRock, Inc., New York, held between 5% and 10% but was registered with less than 2% of the share capital as of December 31, 2022.

Disclosure notifications pertaining to shareholdings filed with Novartis AG and the SIX Swiss Exchange are published on the latter’s electronic publication platform: www.ser-ag.com/en/resources/notifications-market-participants/significant-shareholders.html.

Duty to make an offer
According to the Swiss Federal Act on Financial Infrastructures, anyone who – directly, indirectly or acting in concert with third parties – acquires equity securities exceeding 33 1/3% of the voting rights of a company (whether or not such rights are exercisable) is required to make an offer to acquire all listed equity securities of that company. A company may raise this threshold up to 49% of the voting rights (“opting up”) or may, under certain circumstances, waive the threshold (“opting out”). Novartis AG has not adopted any such measures.

Cross shareholdings
Novartis AG has no cross shareholdings in excess of 5% of capital, or voting rights with any other company.

Overview on shareholder structure
The following tables relate only to registered shareholders and cannot be assumed to represent the entire investor base because nominees and JPMorgan Chase Bank, N.A., as ADS depositary, are registered as shareholders for a large number of beneficial owners.

As of December 31, 2022, Novartis AG had approximately 186 000 registered shareholders.

### Number of registered shareholders/shares

<table>
<thead>
<tr>
<th>As of December 31, 2022</th>
<th>Number of registered shareholders</th>
<th>% of share capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–100</td>
<td>34 085</td>
<td>0.08</td>
</tr>
<tr>
<td>101–1 000</td>
<td>110 467</td>
<td>1.86</td>
</tr>
<tr>
<td>1 001–10 000</td>
<td>37 732</td>
<td>4.32</td>
</tr>
<tr>
<td>10 001–100 000</td>
<td>3 212</td>
<td>0.51</td>
</tr>
<tr>
<td>100 001–1 000 000</td>
<td>475</td>
<td>0.78</td>
</tr>
<tr>
<td>1 000 001–5 000 000</td>
<td>68</td>
<td>1.07</td>
</tr>
<tr>
<td>5 000 001 or more</td>
<td>29</td>
<td>0.48</td>
</tr>
<tr>
<td>Total registered shareholders/shares</td>
<td>186 068</td>
<td>67.03</td>
</tr>
<tr>
<td>Unregistered shares</td>
<td></td>
<td>32.97</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100.00</td>
</tr>
</tbody>
</table>

1 At the record date of the 2022 Annual General Meeting of Shareholders (AGM), unregistered shares amounted to 17.0%.

2 Including significant registered shareholders as listed above.

### Registered shareholders by type

<table>
<thead>
<tr>
<th>As of December 31, 2022</th>
<th>Shareholders in %</th>
<th>Shares in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual shareholders</td>
<td>96.71</td>
<td>15.61</td>
</tr>
<tr>
<td>Legal entities</td>
<td>3.25</td>
<td>37.69</td>
</tr>
<tr>
<td>Nominees, fiduciaries and ADS depositary</td>
<td>0.04</td>
<td>46.70</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

1 Excluding 7.7% of the share capital held as treasury shares by Novartis AG or its fully owned subsidiaries. As of the entry into force of the revised Swiss Code of Obligations on January 1, 2023, Novartis ordinary shares held by certain Swiss foundations controlled by Novartis also no longer carry the right to vote and therefore will be treated for this calculation as treasury shares going forward.

### Registered shareholders by country

<table>
<thead>
<tr>
<th>As of December 31, 2022</th>
<th>Shareholders in %</th>
<th>Shares in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>0.11</td>
<td>0.77</td>
</tr>
<tr>
<td>France</td>
<td>1.97</td>
<td>0.36</td>
</tr>
<tr>
<td>Germany</td>
<td>5.72</td>
<td>1.82</td>
</tr>
<tr>
<td>Japan</td>
<td>0.17</td>
<td>0.45</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>0.06</td>
<td>0.79</td>
</tr>
<tr>
<td>Switzerland 1</td>
<td>87.14</td>
<td>48.39</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.63</td>
<td>23.68</td>
</tr>
<tr>
<td>United States</td>
<td>0.25</td>
<td>21.29</td>
</tr>
<tr>
<td>Other countries</td>
<td>3.95</td>
<td>2.45</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

1 Registered shares held by nominees are shown in the country where the company/affiliate entered in the Share Register as shareholder has its registered seat.

2 Excluding 7.7% of the share capital held as treasury shares by Novartis AG or its fully owned subsidiaries. As of the entry into force of the revised Swiss Code of Obligations on January 1, 2023, Novartis ordinary shares held by certain Swiss foundations controlled by Novartis also no longer carry the right to vote and therefore will be treated for this calculation as treasury shares going forward.
Capital structure

Share capital

As of December 31, 2022, the share capital amounted to CHF 1 201 860 626 fully paid-in and divided into 2 403 721 252 registered shares with a nominal value of CHF 0.50 each.

Shares are listed on the SIX Swiss Exchange (ISIN CH0012005267, symbol: NOVN) and on the New York Stock Exchange (NYSE) in the form of American Depositary Receipts (ADRs) representing American Depositary Shares (ADSs) (ISIN US66987V1098, symbol: NVS).

No authorized and conditional capital exists as of December 31, 2022.

Convertible securities and options

Novartis AG has not issued convertible or exchangeable bonds, warrants, options or other securities granting rights to shares, other than options (or similar instruments such as stock appreciation rights) granted under or in connection with equity-based participation plans of employees. Novartis AG does not grant any new stock options under these plans.

Limitation on transferability

No transferability restrictions are imposed on shares (for registration restrictions, see “—Item 6.C Board practices—Shareholder participation—Voting rights, restrictions and representation—Registration restrictions”). The registration of shareholders in the Share Register or in the ADR register kept by JPMorgan Chase Bank, N.A., does not affect the tradability of shares or ADRs.

Shares, participation certificates, non-voting equity securities, profit-sharing certificates

Shares are issued as uncertificated securities (in the sense of the Swiss Code of Obligations) and as book entry securities (in terms of the Swiss Act on Intermediated Securities). All shares have equal voting rights and carry equal entitlements to dividends. No participation certificates, non-voting equity securities (Genusscheine) or profit-sharing certificates have been issued.

Changes to share capital

<table>
<thead>
<tr>
<th>AGM</th>
<th>Shareholder decision</th>
<th>Shares canceled</th>
<th>Average repurchase share price (CHF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>Capital reduction by CHF 30.16 million (from CHF 1 263 687 410 to CHF 1 233 530 460)</td>
<td>60 313 900</td>
<td>88.18</td>
</tr>
<tr>
<td>2021</td>
<td>Capital reduction by CHF 16.32 million (from CHF 1 233 530 460 to CHF 1 217 210 460)</td>
<td>32 640 000</td>
<td>80.57</td>
</tr>
<tr>
<td></td>
<td>Authorization of the Board to repurchase shares up to a maximum of CHF 10 billion between the 2021 AGM and the 2024 AGM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>Capital reduction by CHF 15.35 million (from CHF 1 217 210 460 to CHF 1 201 860 626)</td>
<td>30 699 668</td>
<td>81.62</td>
</tr>
<tr>
<td></td>
<td>Authorization of the Board to repurchase shares up to a maximum of CHF 10 billion between the 2022 AGM and the 2025 AGM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGM</th>
<th>Proposal to the shareholders</th>
<th>Shares to be canceled</th>
<th>Average repurchase share price (CHF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>Capital reduction by CHF 63.12 million (from CHF 1 201 860 626 to CHF 1 138 738 876)</td>
<td>126 243 500</td>
<td>81.56</td>
</tr>
<tr>
<td></td>
<td>Authorization of the Board to repurchase shares up to a maximum of CHF 10 billion between the 2023 AGM and the 2026 AGM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 All shares were repurchased on the SIX Swiss Exchange second trading line.
2 In addition to the remaining authorization from the 2021 AGM
3 In addition to the remaining authorization from the 2022 AGM

Key Novartis share data

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issued shares</td>
<td>2 403 721 252</td>
<td>2 434 420 920</td>
<td>2 467 060 920</td>
</tr>
<tr>
<td>Treasury shares</td>
<td>284 112 195</td>
<td>199 480 972</td>
<td>210 238 872</td>
</tr>
<tr>
<td>Outstanding shares at December 31</td>
<td>2 119 609 057</td>
<td>2 234 939 948</td>
<td>2 256 822 048</td>
</tr>
<tr>
<td>Weighted average number of shares outstanding</td>
<td>2 181 180 341</td>
<td>2 242 601 173</td>
<td>2 277 041 940</td>
</tr>
</tbody>
</table>

1 Approximately 99 million treasury shares (2021: 102 million, 2020: 103 million) are held in Novartis entities that restrict their availability for use.
Per-share information$^1$

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic earnings per share from</td>
<td>3.19</td>
<td>10.71</td>
<td>3.55</td>
</tr>
<tr>
<td>continuing operations (USD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diluted earnings per share from</td>
<td>3.17</td>
<td>10.63</td>
<td>3.52</td>
</tr>
<tr>
<td>continuing operations (USD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net cash flows from operating</td>
<td>6.53</td>
<td>6.72</td>
<td>5.99</td>
</tr>
<tr>
<td>activities from continuing operations (USD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year-end equity for Novartis AG</td>
<td>28.00</td>
<td>30.31</td>
<td>25.07</td>
</tr>
<tr>
<td>shareholders (USD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend (CHF)$^2$</td>
<td>3.20</td>
<td>3.10</td>
<td>3.00</td>
</tr>
<tr>
<td>Dividend (USD)$^3$</td>
<td>3.46</td>
<td>3.33</td>
<td>3.20</td>
</tr>
</tbody>
</table>

$^1$ Calculated on the weighted average number of shares outstanding, except year-end equity
$^3$ Translated into US dollars at the December 31, 2022, rate of USD 1.081 to the Swiss franc. This translation is an example only, and should not be construed as a representation that the Swiss franc amount represents, or has been or could be converted into US dollars at that or any other rate. 2021 and 2020, dividends are translated into US dollars at the Bloomberg Market System Rate on the payment date.

Key ratios – December 31

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price/earnings ratio$^1$</td>
<td>28.3</td>
<td>8.2</td>
<td>26.7</td>
</tr>
<tr>
<td>Dividend yield (%)$^1$</td>
<td>3.8</td>
<td>3.9</td>
<td>3.6</td>
</tr>
</tbody>
</table>

$^1$ Based on the Novartis share price at December 31 of each year

Key data on ADRs issued in the US

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year-end ADR price (USD)</td>
<td>90.72</td>
<td>87.47</td>
<td>94.43</td>
</tr>
<tr>
<td>High$^1$</td>
<td>93.75</td>
<td>98.47</td>
<td>99.01</td>
</tr>
<tr>
<td>Low$^1$</td>
<td>74.61</td>
<td>79.70</td>
<td>70.67</td>
</tr>
<tr>
<td>Number of ADRs outstanding$^2$</td>
<td>225 435 680</td>
<td>269 891 321</td>
<td>298 755 853</td>
</tr>
</tbody>
</table>

$^1$ Based on daily closing prices
$^2$ The depositary, JPMorgan Chase Bank, N.A., holds one Novartis AG share for every ADR issued

Share price (CHF)

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year-end share price</td>
<td>83.59</td>
<td>80.28</td>
<td>83.65</td>
</tr>
<tr>
<td>High$^1$</td>
<td>87.82</td>
<td>86.75</td>
<td>95.82</td>
</tr>
<tr>
<td>Low$^1$</td>
<td>73.98</td>
<td>73.44</td>
<td>69.96</td>
</tr>
<tr>
<td>Year-end market capitalization</td>
<td>191.5</td>
<td>196.1</td>
<td>214.3</td>
</tr>
<tr>
<td>(USD billions)$^2$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year-end market capitalization</td>
<td>177.2</td>
<td>179.4</td>
<td>188.8</td>
</tr>
<tr>
<td>(CHF billions)$^2$</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$^1$ Based on daily closing prices
$^2$ Market capitalization is calculated based on the number of shares outstanding (excluding treasury shares). Market capitalization in USD is based on the market capitalization in CHF converted at the year-end CHF/USD exchange rate.
Shareholder engagement

Shareholder engagement is fundamental to our commitment to governance and transparency, and the feedback we receive during these engagements helps us create long-term and sustainable value.

We concentrate our outreach efforts on our largest 100 shareholders – portfolio managers, buy-side professionals, stewardship teams and ESG analysts – who represent 60% of our ownership. While the Board Chair, CEO and CFO, together with Investor Relations, are accountable for ensuring effective shareholder engagement, other senior managers from within and outside the Executive Committee also participate in the meetings. We conduct regular outreach to investors throughout the year.

TYPES OF ENGAGEMENTS (SELECT EXAMPLES):

- AGM and quarterly results teleconferences (TCs)
- Bank conferences and management roadshows
- “Meet Novartis Management” capital markets event
- Governance roadshow and TCs
- Board Chair’s TCs for US and UK investors
- ESG roadshows
- Investor Update on Access & Sustainability (formerly known as ESG Investor Day)
- Update on the new organizational model
- Update on the Sandoz business

TOPICS DISCUSSED WITH SHAREHOLDERS DURING 2022:

GROWTH:
- Replacement power
- Growth drivers (Cosentyx, Entresto, Zoilgensma, Kisqali, Kesimpta, Lexapro)
- Policy and pricing environment
- Life cycle management

INNOVATION:
- Progress and milestones
- Data of pipeline projects
- Return on R&D investments

PRODUCTIVITY:
- Progress on financial, strategic and operational performance
- Long-term sustainability of financial performance
- Capital allocation strategy
- New organization model
- Intention to separate Sandoz business

BUILDING TRUST WITH SOCIETY AND CULTURE:
- Board accountability on ESG, and integration of ESG and compensation
- Strong governance, enhanced process and focus on material ESG factors, leading to improved rating agency scores
- Patient access to innovative medicines
- Learning from Novartis Access programs implemented over the decades, including integrated sustainable business models and access principles to help address access and inequities
- ESG targets: full carbon neutrality, patient access targets for strategic innovative therapies, and global health flagship programs
- Progress on culture and other human capital metrics

COMPENSATION AND GOVERNANCE:
- Diversity of the Board, the Executive Committee and the Company
- Board renewal, succession planning and evaluation
- Link of compensation system to key strategic priorities
- Risk oversight
- Stakeholder expectations from the Board on ESG matters

We appreciate the value that shareholders attach to ESG matters. We will continue to integrate ESG into our strategy and to promote transparency through our comprehensive ESG engagement program. We have more than doubled the number of investor engagements on ESG matters in recent years, and in 2022, our CEO led our Investor Update on Access & Sustainability (formerly known as ESG Investor Day) for the fourth time (marking our ninth dedicated ESG event for investors since 2014). We also held virtual roadshows in 2022 as part of our engagement with North American, European and Asian investors.

Voting rights, restrictions and representation

REGISTRATION

Shareholders have the right to vote and to execute all other rights as granted under Swiss law and the Articles of Incorporation (see, in particular, articles 17 and 18 of the Articles of Incorporation).

Each share registered with the right to vote by the third business day before the General Meeting entitles the holder to one vote at General Meetings. Article 5, paragraph 2 of the Articles of Incorporation provides that to be registered with voting rights, a shareholder must declare that he or she acquired the shares in his or her own name and for his or her own account. According to article 5, paragraph 3 of the Articles of Incorporation, the Board may register nominees with the right to vote. The Share Register is an internal, non-public register subject to statutory confidentiality and data privacy.

The Articles of Incorporation are available at www.novartis.com/investors/company-overview/corporate-governance.

REGISTRATION RESTRICTIONS

Article 5, paragraph 2 of the Articles of Incorporation provides that no shareholder shall be registered with the right to vote for more than 2% of the share capital. Given that shareholder representation at General Meetings has traditionally been comparatively low in Switzerland, Novartis AG considers registration restrictions necessary to prevent a minority shareholder from dominating a General Meeting. The Board may, upon request, grant an exemption. Considerations include whether the shareholder supports our goal of creating sustainable value and has a long-term investment horizon. Exemptions are in force for the registered shareholders listed in “—Item 6.C Board practices—Group structure and shareholders—Shareholders—Significant shareholders.” Exemptions also apply to the Novartis Foundation for Employee Participation, Basel, which as of December 31, 2022, was registered in the Share Register with less than 2% of the share capital, and to Norges Bank (Central Bank of Norway), Oslo, which as of December 31, 2022, was not registered but held 2.3% according to a disclosure notification filed with Novartis AG. No further exemptions were requested in 2022. The same restrictions indirectly apply to ADR holders.

Article 5, paragraph 3 of the Articles of Incorporation provides that no nominee shall be registered with the right to vote for more than 0.5% of the registered share capital. The Board may, upon request, grant an exemption from this restriction if the nominee discloses the names, addresses...
and number of shares of the persons for whose account it holds 0.5% or more of the registered share capital. Exemptions are in force for the nominees listed in “—Item 6.C Board practices—Group structure and shareholders—Shareholders—Significant shareholders,” and for the nominee Citibank, London, which in 2015 requested an exemption, but as of December 31, 2022, was not registered in the Share Register. The same restrictions indirectly apply to ADR holders.

According to article 5, paragraph 4 of the Articles of Incorporation, shareholders, ADR holders, or nominees who are linked to each other or who act in concert to circumvent registration restrictions are treated as one person or nominee for the purposes of the restrictions on registration.

The registration restrictions may be changed by resolution of the General Meeting, with approval of at least two-thirds of the votes represented at the meeting.

The Articles of Incorporation are available at www.novartis.com/investors/company-overview/corporate-governance.

ATTENDANCE, REPRESENTATION AND ONLINE PLATFORM
Registered shareholders will receive personal invitations to the General Meetings along with a registration/proxy form or using the online platform. By returning the registration/proxy form or using the online platform, shareholders are able to order an admission card for the General Meeting or appoint another shareholder or the Independent Proxy to vote their shares on their behalf.

If the Independent Proxy is appointed, shareholders can also give voting instructions on alternative or additional motions related to the agenda items either (i) following the recommendations of the Board for such alternative or additional motions, or (ii) opposing such alternative or additional motions. They can also abstain from voting.

Shareholders choosing not to receive the comprehensive invitation materials will be informed of upcoming General Meetings through a letter containing the login credentials to access the online platform as well as a reference to www.novartis.com/investors/shareholder-information/general-meetings, where all relevant information is available.

In accordance with Swiss legislation passed in response to the COVID-19 pandemic, and as in the previous year, physical attendance at the 2022 Annual General Meeting (AGM) was not possible, and shareholders could exercise their voting rights exclusively through the Independent Proxy.

ADR HOLDERS
ADR holders have the rights enumerated in the deposit agreement (such as the right to give voting instructions and to receive dividends). The ADS depositary of Novartis AG – JPMorgan Chase Bank, N.A., New York – holds the shares underlying the ADRs and is registered as a shareholder in the Share Register. An ADR is not a share, and an ADR holder is not a Novartis AG shareholder. Each ADR represents one share. ADR holders exercise their voting rights by instructing the depositary to exercise their voting rights. The ADS depositary exercises the voting rights for registered shares underlying ADRs for which no voting instructions have been given by providing a discretionary proxy to an uninstructed independent designee. Such designee has to be a shareholder.

General Meeting

CONVENING
The AGM must be held within six months after the end of our financial year (December 31), and normally takes place in late February/early March. Extraordinary General Meetings may be requested by the Board, the external auditor, or shareholders representing at least 10% of the share capital.

AGENDA
Shareholders representing shares with an aggregate nominal value of at least CHF 1 million may request that an item be included in a General Meeting agenda. Such requests must be made in writing at least 45 days before the meeting, specifying the requested item and proposal.

POWERS
According to article 17 of the Articles of Incorporation (www.novartis.com/investors/company-overview/corporate-governance), the following powers are vested exclusively in the General Meeting:

- Adoption and amendment of the Articles of Incorporation
- Election and removal of the Board Chair, the Board and Compensation Committee members, the Independent Proxy and the external auditor
- Approval of the management report and the consolidated financial statements
- Approval of the financial statements of Novartis AG, and the decision on the appropriation of available earnings shown on the balance sheet, including dividends
- Approval of the maximum aggregate compensation of the Board (from an AGM until the next AGM) and of the Executive Committee (for the financial year following the AGM). If the maximum aggregate amount of compensation already approved by the AGM is not sufficient to cover the compensation of newly appointed or promoted Executive Committee members, Novartis may use up to 40% of the amount last approved for the newly appointed or promoted Executive Committee members.
- Discharge of Board and Executive Committee members
- Decision on other matters that are reserved by law or by the Articles of Incorporation (e.g., advisory vote on the Compensation Report) to the General Meeting

STATUTORY QUORUMS
The General Meeting passes resolutions and elections with the absolute majority of the votes represented at the meeting. However, under article 18 of the Articles of Incorporation (www.novartis.com/investors/company-overview/corporate-governance), the approval of two-thirds of the votes represented at the meeting is required for:

- Alteration of the purpose of Novartis AG
- Creation of shares with increased voting powers
- Implementation of restrictions on the transfer of registered shares, and the removal of such restrictions
- Authorized or conditional increase of the share capital
- Increase of the share capital out of equity, by contribution in kind, for the purpose of an acquisition of property or the grant of special rights
- Restriction or cancellation of subscription rights
- Change of the registered office of Novartis AG
- Dissolution of Novartis AG

In addition, the law provides for a qualified majority for other resolutions, such as a merger or demerger.
Board of Directors
Composition (as per December 31, 2022)

| BOARD CHAIR: J. Reinhardt | N. Andrews | D. Hochstrasser
| VICE-CHAIR: S. Moroney | T. Buechner | F. van Houten
| LEAD INDEPENDENT DIRECTOR: P. Bula | E. Doherty | A. von Planta
| | B. Heller | C. Sawyers

AUDIT AND COMPLIANCE COMMITTEE
- E. Doherty (Chair)
- T. Buechner
- B. Heller
- F. van Houten
- A. de Pro Gonzalo

COMPENSATION COMMITTEE
- P. Bula (Chair)
- S. Moroney (Chair)
- P. Bula
- B. Heller
- W. Winters

GOVERNANCE, SUSTAINABILITY AND NOMINATION COMMITTEE
- T. Buechner (Chair)
- P. Bula (Chair)
- E. Doherty
- A. von Planta
- A. von Planta

RISK COMMITTEE
- N. Andrews
- A. von Planta
- W. Winters

SCIENCE & TECHNOLOGY COMMITTEE
- J. Reinhardt (Chair)
- N. Andrews
- F. van Houten
- S. Moroney
- C. Sawyers

1 Effective January 1, 2023, Mr. Hochstrasser became a member of the Audit and Compliance Committee and of the Governance, Sustainability and Nomination Committee.
2 Mr. von Planta will not stand for re-election at the 2023 AGM.

Changes to the Board of Directors

Ana de Pro Gonzalo and Daniel Hochstrasser were elected as new Board members at the 2022 AGM. Ann Fudge, Board member since 2008, and Enrico Vanni, Board member and Vice-Chair since 2011 and Lead Independent Director since 2021, did not stand for re-election at the 2022 AGM. The biographies of Ms. Fudge and Mr. Vanni can be found in the 2021 Annual Report (pages 130 and 133), available at www.novartis.com/news/media-library/novartis-annual-report-2021.

Election and term of office

Board members (including the Board Chair) and Compensation Committee members are elected individually by shareholders at the General Meeting for a one-year term of office. The term of office expires at the end of the next AGM.

According to article 20, paragraph 3 of the Articles of Incorporation, a member shall not serve on the Board for more than 12 years. Under special circumstances and if deemed to be in the best interest of the Company, the Board may recommend exceptions to the shareholders (www.novartis.com/investors/company-overview/corporate-governance).

The term limit supports our commitment to renew the Board on an ongoing basis and also follows international best practice. We believe age is still a relevant factor in Board composition, and the GSNC will consider this and other factors – including gender, nationality and ethnicity – when evaluating candidates and exploring ways to increase Board diversity.

Succession planning

The Board Chair, supported by the GSNC, ensures effective succession plans for the Board, the CEO and the Executive Committee. These plans are discussed by the Board in private meetings. A search for a new Board member is launched – normally with the support of a professional executive search company – with individual selection criteria defined based on the evolving needs of the Company and a continuing focus on diversity. The set of competencies (further explained in “—Item 6.C Board practices—Board of Directors—Board skills”) and a balance between continuity of experience and fresh perspectives are also important criteria for the GSNC when evaluating new candidates. Candidates are interviewed by the Board Chair, members of the GSNC, other Board members, and members of the Executive Committee. The GSNC then makes a recommendation to the full Board, and the Board ultimately decides who should be proposed for election at the upcoming AGM.

The Board will propose to the shareholders a new candidate for election at the 2023 AGM. Andreas von Planta already announced in 2021 that he will not stand for re-election at the 2023 AGM.
Independence

All Board members – including the Board Chair – are non-executive and independent, pursuant to applicable corporate governance rules and Novartis independence criteria, which are outlined in Appendix II to the Board Regulations (www.novartis.com/investors/company-overview/corporate-governance). In particular, no Board member is or was a member of the management of Novartis AG or of any other Novartis Group company in the last three financial years up to December 31, 2022, or has or had, except for Daniel Hochstrasser, a significant business relationship with Novartis AG or with any other Novartis Group company. Mr. Hochstrasser fulfilled the independence criteria following his resignation from Bär & Karrer, a Swiss law firm that has a business relationship with Novartis, as of December 31, 2022. During 2022, Mr. Hochstrasser did not belong to any Board committee. No separate meetings of independent Board members were held in 2022.

The independence of Board members is assessed annually. Each Board member completes an independence questionnaire that is subject to review by the GSNC. The GSNC then submits a proposal to the full Board, and the Board determines the independence status of each Board member.

Diversity

Diversity of gender, age, nationality, ethnicity, viewpoints, professional backgrounds and expertise is a key factor to success and Board effectiveness in a constantly evolving environment. A diverse Board ensures that the appropriate balance of skills, expertise, experience and cultural background is represented to discharge its responsibilities and to support long-term value creation for shareholders, patients, employees and other stakeholders. Diversity remains a critical area of focus for the Board, and the GSNC is continuously looking for opportunities to further increase the Board’s diversity when identifying new Board member candidates.

Diversity profile

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Gender</th>
<th>Age</th>
<th>Tenure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swiss</td>
<td>Male</td>
<td>55–60</td>
<td>&lt;3 y</td>
</tr>
<tr>
<td>American</td>
<td>Female</td>
<td>61–65</td>
<td>3–6 y</td>
</tr>
<tr>
<td>Dutch</td>
<td></td>
<td>&gt;65</td>
<td>7–9 y</td>
</tr>
<tr>
<td>German</td>
<td></td>
<td></td>
<td>&gt;9 y</td>
</tr>
<tr>
<td>British</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Spanish</td>
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<td></td>
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<tr>
<td>Irish</td>
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<td></td>
</tr>
<tr>
<td>New Zealander</td>
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</tr>
</tbody>
</table>

* Please note that five Board members have dual nationalities. Each of these nationalities is counted as a half in the above chart.

Board skills

Upon proposal by the GSNC, the Board has determined a diverse set of competencies for its members that aligns with our status as a listed company, as well as our business portfolio, geographic reach and culture. Based on this set of competencies, our Board members were asked to identify their most relevant skills highlighted by their educational background, professional experience and personal achievements.

The GSNC assesses the set of competencies as well as the individual skills annually to ensure that an appropriate balance of skills, expertise, experience and diversity is represented on the Board.

To learn more about our Board members and their individual skills, see “—Item 6.C Board practices—Board of Directors—Members of the Board of Directors.”
Members of the Board of Directors

Joerg Reinhardt, Ph.D.

Chair since 2013 | Nationality: German | Year of birth: 1956

Joerg Reinhardt is a healthcare industry veteran whose career spans nearly 40 years. After receiving his doctorate in pharmaceutical sciences, Mr. Reinhardt joined Sandoz Pharma Ltd., a predecessor to Novartis, in 1982. He held a number of senior leadership positions at Novartis, including Chief Operating Officer and Head of the Vaccines and Diagnostics Division. Additionally, he led Bayer HealthCare AG as chair of the board of management and the executive committee from 2010 to 2013.

Professional experience

• Chair of the board of management and the executive committee, Bayer HealthCare AG, Germany (2010–2013)
• Chief Operating Officer, Novartis AG, Switzerland (2008–2010)
• Head of the Vaccines and Diagnostics Division, Novartis AG, Switzerland (2006–2008)
• Various managerial positions at Sandoz Pharma Ltd. and Novartis AG, Switzerland (1982–2006)

Mandates

• Senate member, Helmholtz Association of German Research Centres, Germany
• Chair of the board of trustees, Institute of Molecular and Clinical Ophthalmology Basel (IOB), Switzerland
• Chair of the board of trustees, Novartis Foundation, Switzerland
• Board member, Swiss Re AG, Switzerland
• Member of the European Advisory Panel, Temasek Holdings Private Ltd., Singapore
• Board member, Lonza Group AG, Switzerland (2012–2013)
• Chair, Genomics Institute of the Novartis Research Foundation, US (2000–2010)

Education

• Doctorate in pharmaceutical sciences, Saarland University, Germany

Key skills

• Medicine/healthcare/R&D
• Leadership/management
• Law/regulatory/risk management

Simon Moroney, D.Phil.

Board member since 2020 | Vice-Chair since March 4, 2022 | Nationality: German/New Zealander | Year of birth: 1959

As co-founder and CEO of MorphoSys AG, Simon Moroney played a central role in establishing the company as a force in the field of therapeutic antibodies, with one of the broadest pipelines of drug candidates in the industry. Mr. Moroney holds both a doctorate and a Master of Science in chemistry.

Professional experience

• Co-founder and CEO, MorphoSys AG, Germany (1992–2019)
• Research associate, Department of Pharmacology, University of Cambridge, UK (1991–1992)
• Assistant professor, Department of Chemistry, University of British Columbia, Canada (1989–1990)

Mandates

• Chair of the board of directors and the Remuneration and Nomination Committee, Biotalys NV, Belgium

Education

• Doctorate in chemistry, University of Oxford, UK
• Master of Science in chemistry, University of Waikato, New Zealand

Key skills

• Leadership/management
• Medicine/healthcare/R&D
• Law/regulatory/risk management
Nancy C. Andrews, M.D., Ph.D.
Board member since 2015 | Nationality: American/Swiss | Year of birth: 1958

Nancy C. Andrews has extensive experience as a physician, scientist, professor and senior administrator at leading academic institutions and hospitals. Her distinguished career spans more than 30 years, with leadership roles at both Harvard Medical School and the Duke University School of Medicine. Dr. Andrews currently chairs the board of the American Academy of Arts and Sciences, and is credited with conducting research that led to advances in understanding iron biology and iron diseases.

Professional experience
- Executive vice president and chief scientific officer, Boston Children’s Hospital, US (2021–present)
- Dean emerita, Duke University School of Medicine, and vice chancellor emerita for academic affairs, Duke University, US (2017–2021)
- Dean, Duke University School of Medicine, and vice chancellor for academic affairs, Duke University, US (2007–2017)
- Professor of pediatrics, pharmacology and cancer biology, Duke University, US (2007–2021)
- Dean for basic sciences and graduate studies, Harvard Medical School, US (2003–2007)
- Biomedical research investigator, Howard Hughes Medical Institute, US (1993–2006)

Mandates
- Board member, Maze Therapeutics Inc., US
- Board member and chair of the Science and Technology Committee, Charles River Laboratories International Inc., US
- Council member, National Academy of Sciences, US
- Former council member (2015–2018) and member, National Academy of Medicine, US
- Chair of the board, American Academy of Arts and Sciences, US
- Member of the Scientific Advisory Board, Dyne Therapeutics Inc., US
- Member of the executive committee of the Corporation, Massachusetts Institute of Technology, US (2019–2022)
- Board member and former chair, Burroughs Wellcome Fund, US (2011–2019)

Education
- Doctor of medicine, Harvard Medical School, US
- Doctorate in biology, Massachusetts Institute of Technology, US
- Master of Science and Bachelor of Science in molecular biophysics and biochemistry, Yale University, US

Key skills
- Medicine/healthcare/R&D
- Leadership/management

Ton Buechner
Board member since 2016 | Nationality: Dutch/Swiss | Year of birth: 1965

Ton Buechner is an engineer by training who started his career in the oil and gas construction industry. Before becoming the CEO of Sulzer AG, he held several divisional leadership roles at the company and worked in markets including Asia. Mr. Buechner most recently served as CEO and chair of the executive board of AkzoNobel NV, where he introduced industry-leading ESG policies.

Professional experience
- CEO and chair of the executive board, AkzoNobel NV, Netherlands (2012–2017)
- CEO, Sulzer AG, Switzerland (2007–2011)
- President, Sulzer Pumps, Switzerland (2003–2006)
- President, Sulzer Turbomachinery Services, Switzerland (2000–2002)
- Various managerial positions at Sulzer AG, China and Switzerland (1994–2000)

Mandates
- Chair of the board of directors and the sustainability board, Swiss Prime Site AG, Switzerland
- Chair of the board of directors and the Strategy and Sustainability Committee, Burckhardt Compression AG, Switzerland
- Advisor, Ammega, Switzerland
- Member of the presidential and shareholder committees, Voith GmbH & Co. KGaA, Germany (2014–2020)
- Member of the supervisory board, Voith GmbH & Co. KGaA, Germany (2014–2018)

Education
- Master of Business Administration, IMD business school, Switzerland
- Master of Science in civil engineering, Delft University of Technology, Netherlands

Key skills
- Finance/accounting
- Leadership/management
- Law/regulatory/risk management
- Environmental, social and governance (ESG)
Patrice Bula
Board member since 2019 | Lead Independent Director since March 4, 2022 | Nationality: Swiss | Year of birth: 1956

Patrice Bula has 40 years of global management experience and is a leader in the consumer goods industry across established and emerging markets. He has served in various senior roles at Nestlé SA, including as general manager of its businesses in China, Germany and South Africa. Most recently, he successfully led the Nestlé Group’s brand strategies, digital marketing transformation and Nespresso business.

Professional experience
- Executive vice president and head of strategic business units, marketing, sales and Nespresso, Nestlé SA, Switzerland (2011–2021)
- Market head of Germany, Nestlé SA, Switzerland (2003–2007)
- Head of the confectionery and biscuits strategic business unit, Nestlé SA, Switzerland (2000–2003)
- Various managerial positions at Nestlé SA, Switzerland (1980–2000)

Mandates
- Chair, Froneri Lux Topco Sarl, Luxembourg
- Board member, Schindler AG, Switzerland
- Board member and chair of the ESG Committee, New Tiger LLC, US
- Co-chair (2020–2021) and board member (2015–2021), Cereal Partners Worldwide SA, Switzerland (Nestlé representative)
- Board member, Froneri Lux Topco Sarl, Luxembourg (Nestlé representative) (2016–2020)
- Board member, Bobst Group SA, Switzerland (2017–2019)
- Chair, Nestlé Nespresso SA, Switzerland (Nestlé representative) (2011–2019)
- Board member, Hsu Fu Chi Food Companies, China (Nestlé representative) (2011–2019)

Education
- Program for Executive Development, IMD business school, Switzerland
- Master’s degree in economic sciences, HEC Lausanne, Switzerland

Key skills
- Finance/accounting
- Leadership/management
- Data/digital

Elizabeth (Liz) Doherty
Board member since 2016 | Nationality: British/Irish | Year of birth: 1957 | Audit Committee Financial Expert

Elizabeth (Liz) Doherty is an expert in finance and accounting who has broad operational experience in international consumer and retail businesses. She began her career in internal audit at Unilever PLC and has held senior finance and accounting roles there and at other companies including Tesco PLC and Reckitt Benckiser Group PLC.

Professional experience
- CFO (interim), Cognita Schools Ltd., UK (2014–2015)
- CFO and board member, Reckitt Benckiser Group PLC, UK (2011–2013)
- CFO (interim), City Inn, UK (2010)
- Group international finance director, Tesco PLC, UK (2001–2007)
- Various managerial positions at Unilever PLC, UK (1981–2001)

Mandates
- Board member and chair of the Audit Committee, Corbion NV, Netherlands
- Member of the supervisory board and chair of the Audit Committee, Royal Philips NV, Netherlands
- Advisor, Affinity Petcare SA and GB Foods SA, Spain
- Board member, Dunelm Group PLC, UK (2013–2019)
- Board member, Ministry of Justice, UK (2015–2019)
- Board member, Delhaize Group, Belgium (2013–2016)
- Board member, Nokia Corp., Finland (2013–2016)

Education
- Fellow, Chartered Institute of Management Accountants, UK
- Bachelor’s degree in liberal studies in science (physics), University of Manchester, UK

Key skills
- Leadership/management
- Finance/accounting
- Law/regulatory/risk management
Bridgette Heller
Board member since 2020 | Nationality: American | Year of birth: 1961

Bridgette Heller has proven experience in the standalone divisions of companies such as Johnson & Johnson, Merck & Co. Inc. and Danone SA, and has served on the audit committees of ADT Corp. and Tech Data Corp. During her career, she has overseen the performance of CFOs and made decisions on strategic R&D priorities. Ms. Heller is an advocate for diversity, equity and inclusion, and traveled globally to reinforce Danone’s commitment to infant and maternal health, inclusive diversity, an equitable workforce for women, and sustainable communities. She is co-founder and CEO of the Shirley Proctor Puller Foundation, an education and youth empowerment nonprofit, and devotes much of her time to strengthening education and sustainability in an underserved community in the US.

**Professional experience**
- Co-founder and CEO, Shirley Proctor Puller Foundation, US (2019–present)
- EVP and president of specialized nutrition, Danone SA, Netherlands (2017–2019)

**Mandates**
- Board member, Integral Ad Science Inc., US
- Board member, Aramark, US
- Board member, Dexcom Inc., US
- Board member, Newman's Own Inc., US
- Member of the board of trustees, Northwestern University, US
- Member of the advisory board, Kellogg School of Management at Northwestern University, US
- Board member, Shirley Proctor Puller Foundation, US
- Board member, Danone SA, Netherlands (2009–2012)
- Board member, Tech Data Corp., US (2016–2020)
- Board member, ADT Corp., US (2012–2016)

**Education**
- Master’s degree in marketing and management policy, Kellogg School of Management at Northwestern University, US
- Bachelor’s degree in economics and computer studies, Northwestern University, US

**Key skills**
- Environmental, social and governance (ESG)
- Leadership/management
- Medicine/healthcare/R&D
- Finance/accounting

Daniel Hochstrasser
Board member since March 4, 2022 | Nationality: Swiss | Year of birth: 1960

Daniel Hochstrasser is an independent dispute resolution specialist practicing in Zurich, Switzerland. Until the end of 2022, he has been leading Bär & Karrer’s arbitration practice for 15 years. He frequently represented parties in complex disputes arising from matters such as M&A transactions, industrial and infrastructure projects, and license, distribution and development agreements, particularly in the pharmaceutical industry. In addition, he led the firm as senior partner from 2011 until 2021. He has published extensively on arbitration and litigation, and lectures at the University of Zurich and the University of St. Gallen in Switzerland.

**Professional experience**
- Attorney-at-law, Daniel Hochstrasser AG, Switzerland (since January 2023)
- Attorney-at-law and partner, Bär & Karrer AG, Switzerland (1993–December 2022)
- Senior partner and chair of the board of directors, Bär & Karrer AG, Switzerland (2011–2021)
- Lawyer, District Court of Affoltern, Court of Appeals/Court of Cassation of Zurich, Switzerland (1987–1992)
- In-house lawyer, Staubli SA, France (1986–1987)

**Mandates**
- Member (2015–2021) and Vice President (since 2021), ICC Court of Arbitration, France
- Member of the Ethics Court, Zurich Bar Association, Switzerland (since 2004)
- Board member, Finland Arbitration Institute, Finland (since 2020)
- Chair of the board of directors, Bär & Karrer AG, Switzerland (2011–2021)
- Member of the Court, Swiss Arbitration Chambers, Switzerland (2004–2014)

**Education**
- Master of Laws (LL.M.), Cornell Law School, US
- Bar examination, Switzerland
- Licentiatus iuris, University of Zurich, Switzerland

**Key skills**
- Leadership/management
- Law/regulatory/risk management
Frans van Houten
Board member since 2017 | Nationality: Dutch | Year of birth: 1960

Frans van Houten is passionate about purpose-driven innovation, entrepreneurship and business transformation to drive customer value and competitiveness. Under his leadership as CEO of Royal Philips, the company transformed into a leading health technology solutions company, leveraging data and informatics to improve healthcare provider results, and became a forerunner across ESG dimensions, having become carbon neutral in its operations since 2020 and recycling over 90% of its waste. Mr. van Houten was an initiator of the World Economic Forum Compact for Responsive and Responsible Leadership as well as founder and co-chair of the Platform to Accelerate the Circular Economy.

Professional experience
• Advisor, Royal Philips NV, Netherlands (October 2022–April 2023)
• CEO and chair of the executive committee and the board of management, Royal Philips NV, Netherlands (2011–October 2022)
• Interim management, ING Group NV, Netherlands (2009–2010)
• CEO and chair of the management board, NXP Semiconductors NV (formerly Philips Semiconductors NV), Netherlands (2004–2009)
• Various managerial positions at Royal Philips Electronics NV, Netherlands (1986–2004)

Mandates
• Chair of the supervisory board, Erasmus Trust Foundation, Netherlands (2014–February 2023)
• Founder and co-chair of the WEF Platform to Accelerate the Circular Economy (PACE), Netherlands (2016–December 2022)
• Member of the steering committee, European Round Table for Industry (ERT), Belgium (2014–November 2022)
• Chair, Graduate Entrepreneur Foundation, Netherlands
• Chair, NL2025 Foundation, Netherlands
• Vice chair and member of the supervisory board, Philips Lighting, Netherlands (2016–2017)

Education
• Master of Science in economics and business management, Erasmus University Rotterdam, Netherlands
• Bachelor of Science in economics, Erasmus University Rotterdam, Netherlands

Key skills
→ Environmental, social and governance (ESG) → Leadership/management → Medicine/healthcare/R&D
→ Data/digital → Law/regulatory/risk management

Andreas von Planta, Ph.D.
Board member since 2006 | Nationality: Swiss | Year of birth: 1955

Andreas von Planta is a leading expert in corporate governance, corporate law and stock exchange regulation. He advises boards of public companies on corporate governance matters and is a sought-after speaker and writer on these topics. He has co-authored the Switzerland chapter of the International Comparative Legal Guide to Corporate Governance for many years.

Professional experience
• Senior counsel, Lenz & Staehelin, Switzerland (2017–present)
• Partner, Lenz & Staehelin, Switzerland (1988–2017)

Mandates
• Board member, Helvetia Holding AG, Switzerland
• Member of the board of trustees, Novartis Foundation, Switzerland
• Board member, Helvetia Schweizerische Lebensversicherungsgesellschaft AG, Switzerland
• Board member, Helvetia Schweizerische Versicherungsgesellschaft AG, Switzerland
• Chair, HSBC Private Bank (Suisse) SA, Switzerland
• Chair, HSBC Private Banking Holdings (Suisse) SA, Switzerland
• Board member, Socotab Frana SA, Switzerland
• Chair of the regulatory board, SIX Swiss Exchange AG, Switzerland
• Chair of the Audit Committee, International Road Transport Union, Switzerland
• Board member, Société Immobilière Quai Gustave Ador 50 SA, Switzerland
• Board member, Burberry (Suisse) SA, Switzerland (2001–2018)
• Vice chair of the board of directors, A.P. Moller Finance SA, Switzerland (1997–2022)
• Board member, Raymond Weil SA, Switzerland (2007–2018)
• Board member and former chair, Clinique Générale-Beaulieu SA, Switzerland (2008–2016)
• Board member and former chair, Schweizerische National Versicherungs AG, Switzerland (1997–2015)
• Board member, Holcim AG, Switzerland (2003–2014)

Education
• Master of Laws, Columbia Law School, US
• Bar examination, Switzerland
• Doctorate in law, University of Basel, Switzerland
• Licentiatus iuris, University of Basel, Switzerland

Key skills
→ Environmental, social and governance (ESG) → Law/regulatory/risk management
Ana de Pro Gonzalo
Board member since March 4, 2022 | Nationality: Spanish | Year of birth: 1967 | Audit Committee Financial Expert

Since starting her career at Arthur Andersen, Ana de Pro Gonzalo has worked across a variety of industries, ranging from construction and real estate to engineering and telecommunications. With deep expertise in finance, capital markets and technology, she has held executive positions at several multinational companies. Most recently, she spent 10 years as chief financial officer of Amadeus IT Group, a leading software provider for the global travel and tourism industry.

**Professional experience**
- Chief financial officer, Amadeus IT Group SA, Spain (2010–2020)
- Corporate general manager, Sacyr Vallehermoso SA, Spain (2002–2010)
- Deputy general manager and finance director, Metrovacesa SA, Spain (1994–2002)
- Senior auditor, Arthur Andersen SA, Spain (1990–1994)

**Mandates**
- Member of the supervisory board and chair of the Audit Committee, STMicroelectronics NV, Netherlands
- Board member, National Express Group PLC, UK
- Board member, Indra Sistemas SA, Spain (2020–2022)

**Education**
- General Management Program (PDG), IESE Business School, Spain
- Bachelor of Science in business studies, Complutense University of Madrid, Spain

**Key skills**
- Leadership/management
- Finance/accounting
- Law/regulatory/risk management

Charles L. Sawyers, M.D.
Board member since 2013 | Nationality: American | Year of birth: 1959

Charles L. Sawyers is a highly accomplished expert and leader in cancer research. As a physician and prominent scientist, he has a deep understanding of the benefits of drugs for patients and society at large, and the importance of access to medicines. Dr. Sawyers co-developed the Novartis cancer drug Gleevec/Glivec and has received numerous honors and awards, including the Lasker-DeBakey Clinical Medical Research Award.

**Professional experience**
- Chair of the Human Oncology and Pathogenesis Program, Memorial Sloan Kettering Cancer Center, US (2006–present)
- Professor of medicine (2008–present), and professor of cell and developmental biology (2011–present), Weill Cornell Graduate School of Medical Sciences, US
- Associate chief, Division of Hematology-Oncology, University of California, Los Angeles, US (1996–2006)

**Mandates**
- Member, National Academy of Medicine, US
- Member, National Academy of Sciences, US
- Investigator, Howard Hughes Medical Institute, US
- Science advisor for the following US companies: Arsenal Capital Partners; BeiGene Ltd.; Blueprint Medicines Corp.; Foghorn Therapeutics Inc.; Housey Pharmaceutical Research Laboratories; KSQ Therapeutics Inc.; Nextech Invest Ltd.; ORIC Pharmaceuticals Inc.; PMV Pharmaceuticals Inc.; The Column Group
- Member, National Cancer Advisory Board, US (2012–2020)

**Education**
- Doctor of medicine, Johns Hopkins University School of Medicine, US
- Bachelor of Arts, Princeton University, US

**Key skills**
- Medicine/healthcare/R&D
- Leadership/management
- Environmental, social and governance (ESG)
Corporate Secretary
Charlotte Pamer-Wieser, Ph.D.

Self-assessment

The Board and its committees conduct a self-assessment once a year, covering topics including Board composition, purpose, scope and responsibilities; succession planning; Board processes and governance; interaction between the Board and the Executive Committee; Board meetings and pre-reading material; team effectiveness; and Board Chair and peer evaluation. Every third year, this process is conducted by an independent external consultant. This last occurred in 2020 with the consulting firm Egon Zehnder.

Anonymous survey
- Each Board member fills out an anonymous survey.
- A report identifying key strengths and challenges is produced for the Board and its committees.

Qualitative review
- Based on the results, the Board Chair and the committee chairs each lead a qualitative review with their colleagues and then with the entire Board.
- In addition, the Vice-Chair leads a qualitative review of the Board Chair’s performance, without the Chair being present, and then provides the Board Chair with the Board’s feedback.

Outcome
- The last self-assessment of October 2022 determined that the Board and its committees are functioning effectively and efficiently.
- The feedback confirmed that the Board has an open culture, fostering a broad range of viewpoints.
- The results also identified key areas on which to focus, such as further development of Novartis strategy; oversight of a range of challenging technology and reorganizational projects, and the impact of the current geopolitical situation in Europe, the US and China, including pricing.

William T. Winters
Board member since 2013 | Nationality: British/American | Year of birth: 1961

William T. Winters has extensive leadership experience in the financial sector. He began his career at JPMorgan Chase & Co. in 1983 and has held management roles across several market areas and in corporate finance. Mr. Winters founded Renshaw Bay LLP, an alternative asset management firm, and now serves as CEO of Standard Chartered PLC, where he is leading a digital transformation of the global bank.

Professional experience
- CEO, Standard Chartered PLC, UK (2015–present)
- Chair and CEO, Renshaw Bay LLP, UK (2011–2015)

Mandates
- Board member, Standard Chartered Bank PLC, UK
- Member of the board of overseers, International Rescue Committee, UK
- Chair of the board of trustees, The Coronet Theatre, UK
- Commissioner, Independent Commission on Banking, UK (2010–2011)

Education
- Master of Business Administration, Wharton School of the University of Pennsylvania, US
- Bachelor’s degree in international relations, Colgate University, US

Key skills
- Data/digital
- Leadership/management
- Law/regulatory/risk management
- Finance/accounting

William T. Winters

Item 6. Directors, Senior Management and Employees
Trainings

Our Board receives regular briefings and trainings on ethics, risks and compliance, ESG and other relevant topics. In 2022, each Board member completed the following trainings:

• Health, Safety and Environment Policy
• ‘Fit to Commit’, which focused on anti-bribery, insider trading and procurement
• An ESG educational session conducted by an external expert on holistic value creation
• Third Party Risk Management

Our Chief Legal Officer also provides regular updates to our Board members on developments related to insider trading laws and regulations and briefs the members of the Board and the Executive Committee on an annual basis on their respective duties. In addition, the Company offers a broad range of external trainings to its Board members.

Role of the Board and its committees

The Board is responsible for the overall direction and oversight of management, and holds the ultimate decision-making authority, with the exception of decisions reserved for shareholders.

The Board has delegated certain of its duties and responsibilities to its five committees led by a Board-elected committee chair, as set out in the Board Regulations (www.novartis.com/investors/company-overview/corporate-governance). In some cases, these responsibilities are of an advisory or preparatory nature. In other cases, the committee has decision-making power that is subject to final Board approval, or the responsibilities have been fully delegated to the committee. All committees have the authority to retain external consultants.

Any Board member may request a Board or committee meeting and the inclusion of an agenda item. Before meetings, Board members receive materials to help them prepare for the discussions and to inform decision-making.

Attendance at Board and Board Committee Meetings in 2022

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Board Attendance</th>
<th>Audit and Compliance Committee Attendance</th>
<th>Compensation Committee Attendance</th>
<th>Governance, Sustainability and Nomination Committee Attendance</th>
<th>Risk Committee Attendance</th>
<th>Science &amp; Technology Committee Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>J. Reinhardt</td>
<td>Board Chair</td>
<td>10/10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4/4</td>
</tr>
<tr>
<td>S. Moroney</td>
<td>Vice-Chair</td>
<td>10/10</td>
<td></td>
<td>7/7</td>
<td></td>
<td></td>
<td>4/4</td>
</tr>
<tr>
<td>P. Bula</td>
<td>Lead Independent Director</td>
<td>10/10</td>
<td></td>
<td>7/7</td>
<td></td>
<td></td>
<td>3/3</td>
</tr>
<tr>
<td>N. Andrews</td>
<td>Member</td>
<td>9/10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5/5</td>
</tr>
<tr>
<td>T. Buechner</td>
<td>Member</td>
<td>10/10</td>
<td>7/7</td>
<td></td>
<td></td>
<td></td>
<td>5/5</td>
</tr>
<tr>
<td>E. Doherty</td>
<td>Member</td>
<td>10/10</td>
<td>7/7</td>
<td></td>
<td></td>
<td></td>
<td>5/5</td>
</tr>
<tr>
<td>B. Heller</td>
<td>Member</td>
<td>10/10</td>
<td>7/7</td>
<td></td>
<td></td>
<td></td>
<td>7/7</td>
</tr>
<tr>
<td>F. van Houten</td>
<td>Member</td>
<td>10/10</td>
<td>7/7</td>
<td></td>
<td></td>
<td></td>
<td>3/3</td>
</tr>
<tr>
<td>D. Hochstrasser</td>
<td>Member</td>
<td>8/8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3/4</td>
</tr>
<tr>
<td>A. von Planta</td>
<td>Member</td>
<td>10/10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3/3</td>
</tr>
<tr>
<td>A. de Pro Gonzalo</td>
<td>Member</td>
<td>8/8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5/5</td>
</tr>
<tr>
<td>C. Sawyers</td>
<td>Member</td>
<td>10/10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3/3</td>
</tr>
<tr>
<td>W. Winters</td>
<td>Member</td>
<td>9/10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6/7</td>
</tr>
</tbody>
</table>

1 Ms. de Pro Gonzalo and Mr. Hochstrasser were elected at the 2022 AGM.

Further details can be found on pages 140 – 145.
Board of Directors

Primary responsibilities

- Strategy: decides on the ultimate direction of the Group’s business (including portfolio, markets, acquisitions and divestments), considering also key ESG aspects
- Structure and organization: determines major changes in the Group’s structure and organization
- Culture: oversees the strategy and implementation of the corporate culture
- Ethics and compliance: oversees the Group’s ethics and compliance framework, including the approval of fundamental corporate policies such as the Novartis Code of Ethics
- Risk management: oversees the Group’s risk management system, the most significant risks, and how these risks are managed
- Finance: determines the Group’s accounting system, financial controls and financial planning; reviews and approves the Annual Report (including the Compensation Report)
- Non-financial reporting: reviews and approves the Group’s annual reporting on non-financial matters
- People and organization: nominates or appoints, removes, and determines responsibilities of key executives, and succession planning

Key activities in 2022

- Oversaw the Company’s strategy to become a fully focused medicines company with leading technology in key therapeutic and geographic areas
- Reviewed the set-up and functioning of the Executive Committee in the context of the Company’s new organizational structure
- Reviewed the geopolitical situation in Europe, with a special focus on the impact on the Russian and Ukrainian markets
- Discussed and closely monitored the Transformation for Growth project to ensure a smooth transition and the successful implementation of its objectives
- Received an update on the US market and our priorities to accelerate growth in Innovative Medicines and become a top player in the market
- Received an update on the German market and the Company’s strategic ambition to become the market leader in Germany
- Received updates from Global Drug Development and Operations
- Reviewed and discussed strategic considerations around mergers and acquisitions, and the Company’s larger strategic moves to drive sustainable growth
- Conducted detailed discussions about the strategic review of Sandoz, deciding that a separation through a 100% spin-off would offer the best value proposition to investors (subject to shareholders approval)
- Discussed the Company’s ESG strategy, plans and developments, and attended an ESG education session on holistic value creation
- Discussed the upcoming non-financial disclosure regulations and Novartis non-financial reporting governance
- Discussed longer-term Board succession planning and required profiles, proposing a new Board member candidate to be elected at the 2023 AGM
- Discussed the amendment of the Articles of Incorporation of Novartis AG as part of the reform of Swiss corporate law
- Discussed and reviewed the annual Board self-evaluation

Meetings

<table>
<thead>
<tr>
<th>Details</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of meetings held</td>
<td>10</td>
</tr>
<tr>
<td>Number of members</td>
<td>13</td>
</tr>
<tr>
<td>Approximate average duration (hours)</td>
<td>6:30</td>
</tr>
<tr>
<td>Meeting attendance</td>
<td>98.5%</td>
</tr>
</tbody>
</table>

The Board met ten times in 2022. This includes regular meetings in January, April, June, August, October and December, and additional special meetings to deal with ad hoc matters. Board committees typically meet the day before the meetings of the full Board. The Board held virtual, hybrid and physical meetings, with participants joining in person when possible.

Documents

- Articles of Incorporation of Novartis AG
- Board Regulations

www.novartis.com/investors/company-overview/corporate-governance

1 Ms. de Pro Gonzalo and Mr. Hochstrasser were elected at the 2022 AGM and have attended all Board meetings since their election.
Audit and Compliance Committee

Primary responsibilities

- Supervises the external auditor, and selects and nominates the external auditor for election by the shareholders (FD)**
- Oversees Internal Audit (FD)**
- Oversees accounting policies, financial controls, and compliance with accounting and internal control standards (FD)**
- Approves financial statements for the first three quarters of each calendar year and the corresponding financial results releases (FD)**, and reviews the annual financial statements and the corresponding financial results releases (FBA)***
- Reviews the non-financial data contained in the Group’s annual reporting (FBA)***
- Oversees compliance with laws, regulations and internal policies related to its subject matter expertise (FD)**
- Reviews updates with regards to Quality Assurance and patient safety twice a year and Health Safety & Environment once a year (FD)**
- Reviews updates from the SpeakUp Office twice a year (FD)**
- Reviews the Group’s tax policy every two years (FD)**
- Reviews updates in closed sessions with the Chief Financial Officer, Chief Audit Officer, and external auditor

Key activities in 2022

- Evaluated the performance of the external auditor KPMG during 2022
- Reviewed the accounting and financial reporting, focusing on those areas involving significant risk or judgment
- Monitored the geopolitical situation and reviewed the treasury aspects and cash collection in Russia
- Reviewed and discussed the Company’s approach to non-financial reporting and assurance
- Reviewed the timelines and milestones of the intended Sandoz spin-off
- Received an update on data privacy and its mechanisms of classifications and control
- Received a presentation on foreign exchange risk management at Novartis
- Liaised with the Risk Committee to ensure adequate oversight of the Company’s key transformation projects (Enterprise Data Governance and Management and Lean Digital Core (LDC) program)
- Received reports and updates from Internal Audit; Quality; Ethics, Risk & Compliance; the SpeakUp Office; Health, Safety & Environment; and Legal, and discussed progress on identifying and remediying the root causes of issues

Meetings

<table>
<thead>
<tr>
<th>Number of meetings held</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of members</td>
<td>5</td>
</tr>
<tr>
<td>Approximate average duration (hours)</td>
<td>2:35</td>
</tr>
<tr>
<td>Meeting attendance</td>
<td>100%</td>
</tr>
<tr>
<td>E. Doherty (Chair, Audit Committee Financial Expert)</td>
<td>7</td>
</tr>
<tr>
<td>T. Buechner</td>
<td>7</td>
</tr>
<tr>
<td>B. Heller</td>
<td>7</td>
</tr>
<tr>
<td>F. van Houten</td>
<td>7</td>
</tr>
<tr>
<td>A. de Pro Gonzalo† (Audit Committee Financial Expert)</td>
<td>5</td>
</tr>
</tbody>
</table>

Documents

- Board Committees Charter, Appendix I to the Board Regulations
- www.novartis.com/investors/company-overview/corporate-governance

† Ms. de Pro Gonzalo became a member of the Audit and Compliance Committee after the 2022 AGM and has attended all Audit and Compliance Committee meetings since that time.
Compensation Committee

Primary responsibilities

- Designs, reviews and recommends to the Board the compensation policies and programs (FBA)***
- Advises the Board on the compensation of Board members and the CEO (A/P)*
- Decides on the compensation of Executive Committee members (FD)**
- Prepares the Compensation Report and the Say-on-Pay brochure, and submits them to the Board for approval (FBA)***

Key activities in 2022

- Made decisions relating to Executive Committee and wider employee compensation during the year
- Established compensation to be paid for the future Sandoz board and executive committee members
- Determined the critical performance measures (including financial, strategic, operational, innovation and ESG) to be considered in the 2022 and 2023 incentive plan targets
- Reviewed the achievement of incentive plan targets for the Executive Committee members
- Reviewed shareholder and proxy advisor feedback related to Novartis compensation practices and disclosures and to those of peer companies
- Reviewed disclosures in the Novartis Compensation Report
- Proposed appropriate peer companies for comparisons of board and executive committee compensation, and assessed the Company’s level of compensation against the peer group
- Reviewed incentive plan rules to secure pay-for-performance alignment while preserving market competitiveness
- Appointed a new independent advisor to the Compensation Committee
- Reflected on effectiveness of the Company’s compensation programs in view of its strategy to become a fully focused medicines company, following announcements of the introduction of a new organizational structure and the intention to separate the Sandoz business by way of a 100% spin-off
- Reviewed the Compensation Committee charter

Meetings

- Number of meetings held 7
- Number of members 4
- Approximate average duration (hours) 1:40
- Meeting attendance 96.5%

Documents

- Board Committees Charter, Appendix I to the Board Regulations

www.novartis.com/investors/company-overview/corporate-governance

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1 A/P = advisory or preparatory task
2 FD = fully delegated task
3 FBA = task subject to final Board approval
Governance, Sustainability and Nomination Committee

Primary responsibilities

- Oversees the Company's strategy, governance and progress on sustainability, including access to medicine and healthcare, global health, environmental sustainability, human capital management and other material ESG aspects (FBA)***
- Recommends corporate governance best practices to the Board (FBA)***
- Reviews the Articles of Incorporation and Board Regulations on a periodic basis (FD)**
- Reviews the composition and size of the Board and its committees as well as the skills matrix on a regular basis (FBA)***
- Identifies new Board member candidates and recommends to the Board whether existing Board members should stand for re-election (FBA)***
- Prepares and reviews succession plans for the Board Chair, the Vice-Chair, the Lead Independent Director, Board members, committee members and chairs, and the CEO (FBA)***
- Reviews the independence of each Board member on an annual basis (FBA)***
- Reviews directorships and agreements of Board members for conflicts of interest, and deals with conflicts of interest (FBA)***

Key activities in 2022

- Evaluated progress on sustainability at Novartis, focusing on material ESG factors, together with targets and metrics
- Received updates on ESG and Global Health covering the Company’s ESG priorities and 5-year roadmap
- Received an update on environmental sustainability covering governance, strategy and progress against near- and longer-term targets for carbon emissions, waste reduction and water consumption
- Received an update on human capital management covering the Company's People & Organization strategy, key people metrics and progress in its culture journey
- Evaluated the results of the 2022 AGM as well as investor and analyst feedback from ESG / Governance roadshows held in 2022
- Discussed and recommended to the Board amendments to the Articles of Incorporation of Novartis AG in connection with the reform of Swiss corporate law
- Discussed candidates for the Sandoz board chair elect and the nomination process for the entire Sandoz board
- Discussed the composition of, and the succession for, the (Novartis) Board and its committees on a regular basis

Meetings

| Number of meetings held | 3 |
| Number of members | 5 |
| Approximate average duration (hours) | 2:00 |
| Meeting attendance | 100% |

Documents

- Board Committees Charter, Appendix I to the Board Regulations
- www.novartis.com/investors/company-overview/corporate-governance

* A/P = advisory or preparatory task
** FD = fully delegated task
*** FBA = task subject to final Board approval
## Risk Committee

### Primary responsibilities

- Oversees the risk management system and processes (FBA)**
- Reviews, together with management, the prioritization and handling of risks, the risk portfolio, and actions implemented by management (FBA)**
- Performs deep dives into key risk areas and fosters a culture of smart risk-taking (FBA)**
- Reviews updates on cyber security on an annual basis (FD)**

### Key activities in 2022

- Received updates on Enterprise Risk Management mitigation measures and results
- Evaluated the emerging risks associated with the current geopolitical crisis in Russia and Ukraine, and mitigation actions
- Received a presentation on launch excellence in Japan, evaluating opportunities and risks for Innovative Medicines
- Reviewed and discussed the current opportunities and risks at Global Drug Development
- Discussed the performance, risk management and transformation of Novartis Technical Operations associated supply chain
- Received updates and closely monitored the Enterprise Data Governance and Management and the risk assessment and mitigation of the Lean Digital Core (LDC) program
- Received a presentation on falsified medicines covering the various types of falsification and indirect import
- Evaluated the enterprise risks for Innovative Medicines in the US for 2022 related to the Transforming for Growth program, pipeline portfolio growth and diversity in clinical trials
- Reviewed the Third-Party Risk Management (TPRM) program
- Discussed the key risks associated with Intellectual Property (IP protection, IP enforcement, third-party assertion and trade secrets)
- Analyzed the opportunities and risks around talent management in key areas and geographies
- Received a deep-dive update on cyber security, including on data loss protection, from the Chief Security Officer

### Meetings

<table>
<thead>
<tr>
<th>Number of meetings held</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of members</td>
<td>5</td>
</tr>
<tr>
<td>Approximate average duration (hours)</td>
<td>1:50</td>
</tr>
<tr>
<td>Meeting attendance</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Documents

- Board Committees Charter, Appendix I to the Board Regulations

www.novartis.com/investors/company-overview/corporate-governance

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* A/P = advisory or preparatory task
* FD = fully delegated task
* FBA = task subject to final Board approval
Science & Technology Committee

Primary responsibilities

- Monitors emerging scientific, data-related, technological and research trends and issues, and brings recommendations to the Board (FBA)***
- Informs the Board on a periodic basis about critical developments for the success of the portfolio and for scientific, technological and research activities as well as benchmarking (A/P)*
- Assists the Board with setting the Company’s strategy for science, data, technology and research (A/P)*
- Assists the Board with oversight and evaluation of the performance of the Company’s scientific, technological and R&D activities (FBA)***
- Reviews performance and proposed targets in the area of science, technology and research (FD)**
- Reviews other matters in relation to science, data, technology and research that the committee may, in its own discretion, deem desirable in connection with its responsibilities (A/P)*

Key activities in 2022

- Reviewed and provided guidance on the technology strategy for the Novartis Institutes of BioMedical Research (NIBR)
- Reviewed the Company’s early clinical pipeline
- Discussed the performance of Global Drug Development and its future strategy
- Provided guidance on the build-up of the Strategy & Growth function, and discussed the Company’s innovation strategy with the Strategy & Growth leadership

Meetings

<table>
<thead>
<tr>
<th>Number of meetings held</th>
<th>4</th>
<th>J. Reinhardt (Chair)</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of members</td>
<td>5</td>
<td>N. Andrews</td>
<td>4</td>
</tr>
<tr>
<td>Approximate average duration (hours)</td>
<td>6:00</td>
<td>F. van Houten</td>
<td>3</td>
</tr>
<tr>
<td>Meeting attendance</td>
<td>95%</td>
<td>S. Moroney</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C. Sawyers</td>
<td>4</td>
</tr>
</tbody>
</table>

Documents

- Board Committees Charter, Appendix I to the Board Regulations

www.novartis.com/investors/company-overview/corporate-governance

* A/P = advisory or preparatory task
** FD = fully delegated task
*** FBA = task subject to final Board approval
Board Chair

The Board Chair leads the Board to represent the interests of all stakeholders and ensures an appropriate balance of power between the Board and the Executive Committee. In this role, the Board Chair:
• Provides leadership to the Board
• Supports and mentors the CEO
• Ensures that the Board and its committees work effectively
• Sets the agenda, style and tone of Board discussions, promoting constructive dialogue and effective decision-making
• Ensures onboarding programs for new Board members, and continuing education for and specialization of all Board members
• Ensures the Board’s annual performance evaluation
• Promotes effective relationships and communication between Board and Executive Committee members
• Ensures effective communication with the Company’s shareholders, other stakeholders and the public

Vice-Chair and Lead Independent Director

Vice-Chair
The Vice-Chair has the following responsibilities:
• Leads the Board in case and as long as the Board Chair is incapacitated
• Leads the yearly session of the Board members to evaluate the performance of the Board Chair, during which the Board Chair is not present

The Vice-Chair also provides advice and support to the Board Chair.

Lead Independent Director
To support adequate control mechanisms, the Board Regulations outline the role of the Lead Independent Director. The Lead Independent Director has the following responsibilities:
• Chairs the sessions of the independent Board members
• Leads the independent Board members in the event of a crisis or matter requiring their separate consideration or decision

The roles of the Vice-Chair and the Lead Independent Director can be held by two Board members or by one Board member (combined role).

Honorary Chairmen

Alex Krauer and Daniel Vasella were appointed Honorary Chairmen in recognition of their significant achievements on behalf of Novartis. In December 2021, Mr. Krauer passed away at the age of 90.

Mr. Vasella is not provided with Board documents and does not attend Board meetings.

Mandates outside the Novartis Group

According to article 34, paragraph 1 of the Articles of Incorporation (www.novartis.com/investors/company-overview/corporate-governance), the following limitations on mandates apply:

<table>
<thead>
<tr>
<th>Maximum number of mandates</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandates</td>
<td>10</td>
</tr>
<tr>
<td>Other listed companies ¹</td>
<td>4</td>
</tr>
</tbody>
</table>

¹ Holding a chair position of the board of directors in other listed companies counts as two mandates.

According to article 34, paragraph 3 of the Articles of Incorporation (www.novartis.com/investors/company-overview/corporate-governance), the following mandates are not subject to the above-mentioned limitations:

<table>
<thead>
<tr>
<th>Maximum number of mandates</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandates in companies that are controlled by Novartis AG or companies controlled by it</td>
<td>No limit</td>
</tr>
<tr>
<td>Mandates held at the request of Novartis AG or companies controlled by it</td>
<td>5</td>
</tr>
<tr>
<td>Mandates in associations, charitable organizations, foundations, trusts and employee welfare foundations</td>
<td>10</td>
</tr>
</tbody>
</table>

“Mandates” means those in the supreme governing body of a legal entity that is required to be registered in the commercial register or a comparable foreign register. Mandates in different legal entities that are under joint control are deemed to be one mandate.
Executive Committee

Composition (as per December 31, 2022)

Vasant (Vas) Narasimhan
Chief Executive Officer

Shreeram Aradhya
President, Global Drug Development & Chief Medical Officer

Vasant (Vas) Narasimhan
Chief Executive Officer

Harry Kirsch
Chief Financial Officer

Robert (Rob) Kowalski
Chief People & Organization Officer

Steffen Lang
President, Operations

Victor Bulto
President, Innovative Medicines US

Aharon (Ronny) Gal
Chief Strategy & Growth Officer

Klaus Moosmayer
Chief Ethics, Risk & Compliance Officer

Marie-France Tschudin
President, Innovative Medicines International & Chief Commercial Officer

Karen L. Hale
Chief Legal Officer

Aharon (Ronny) Gal
Chief Strategy & Growth Officer

Fiona H. Marshall
President, Novartis Institutes for BioMedical Research (NIBR)

Changes to the Executive Committee

Susanne Schaffert, President of Novartis Oncology since 2019, stepped down from her role following the Company’s decision to integrate the Pharmaceuticals and Oncology business units and create separate US and International commercial organizations under the Innovative Medicines (IM) Division, effective April 4, 2022. Marie-France Tschudin, President of Novartis Pharmaceuticals since 2019, was appointed President, Innovative Medicines International & Chief Commercial Officer, effective April 4, 2022. Victor Bulto, President, Novartis Pharmaceuticals Corporation, US, since 2019, was appointed President, Innovative Medicines US, effective April 4, 2022. He has been a member of the Executive Committee since May 1, 2022. Robert Weltevreden, Head of Customer & Technology Solutions (CTS) since February 1, 2021, stepped down from his role following the Company’s decision to combine Novartis Technical Operations (NTO) and CTS into a new Operations unit, effective April 4, 2022. Steffen Lang, Global Head of Novartis Technical Operations since 2017, was appointed President, Operations, effective April 4, 2022. John Tsai, Head of Global Drug Development and Chief Medical Officer, stepped down from his role effective May 15, 2022. Shreeram Aradhye was appointed President, Global Drug Development & Chief Medical Officer, effective May 16, 2022. Aharon (Ronny) Gal was appointed Chief Strategy & Growth Officer, effective July 18, 2022. From April 4, 2022, until July 17, 2022, Lutz Hegemann, President Global Health & Sustainability, served as ad interim Chief Strategy & Growth Officer but was not a member of the Executive Committee. Richard Saynor, Chief Executive Officer, Sandoz, stepped down from the Executive Committee effective October 25, 2022, following his appointment as CEO designate of the Sandoz standalone company expected to be created in the second half of 2023. James (Jay) Bradner, President of the Novartis Institutes for BioMedical Research (NIBR), stepped down from his role effective October 31, 2022. Fiona H. Marshall was appointed President of the Novartis Institutes for BioMedical Research (NIBR), effective November 1, 2022. The biographies of the former members of the Executive Committee can be found in the 2021 Annual Report (pages 147 – 149), available at www.novartis.com/news/media-library/novartis-annual-report-2021.

Role of the Executive Committee

The Board has appointed the Executive Committee members and delegated the overall responsibility for and oversight of the operational management of Novartis to them, including:

• Recruiting, appointing and promoting senior management
• Ensuring the efficient operation of the Group and the achievement of optimal results
• Promoting an active internal and external communications policy
• Developing policies and strategic plans for Board approval, and implementing those approved
• Submitting the following to the Board for approval: investments, divestments, transactions, contracts and litigations with a value exceeding USD 500 million, and capital market and other important financing transactions, as well as all other matters of fundamental significance to the Novartis Group
• Preparing and submitting quarterly and annual reports to the Board and its committees
• Informing the Board of all matters of fundamental significance to the businesses
• Dealing with any other matters delegated by the Board

There are no contracts between Novartis and third parties whereby Novartis would delegate any business management tasks to such third parties.
CEO

With the support of the Executive Committee, the CEO is responsible for the operational management of Novartis. This includes effectively implementing the Company strategy, delivering financial results, and shaping a corporate culture of empowerment and responsibility to help drive innovation, performance and reputation.

In addition to other Board-assigned duties, the CEO leads the Executive Committee, and is responsible for building and maintaining an effective executive team. With the support of the Executive Committee, the CEO is responsible for:

- Ensuring Novartis has the capabilities to achieve its long-term strategic objectives
- Developing robust management succession and development plans for presentation to the Board
- Promoting effective communication with shareholders and other stakeholders
- Ensuring Novartis conducts its business in a legal and ethical manner
- Developing an effective risk control framework for all business activities
- Ensuring the flow of information to the Board is accurate, timely and clear

Diversity

The composition as of December 31, 2022, in terms of nationality, gender, age and length of tenure, is shown in the following charts:

Diversity profile

Nationality

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>American</td>
<td>41%</td>
</tr>
<tr>
<td>German</td>
<td>18%</td>
</tr>
<tr>
<td>Swiss</td>
<td>18%</td>
</tr>
<tr>
<td>British</td>
<td>9%</td>
</tr>
<tr>
<td>Spanish</td>
<td>9%</td>
</tr>
<tr>
<td>Israeli</td>
<td>5%</td>
</tr>
</tbody>
</table>

Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>73%</td>
</tr>
<tr>
<td>Female</td>
<td>27%</td>
</tr>
</tbody>
</table>

Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;45</td>
<td>9%</td>
</tr>
<tr>
<td>45-50</td>
<td>9%</td>
</tr>
<tr>
<td>&gt;50</td>
<td>82%</td>
</tr>
</tbody>
</table>

Tenure

<table>
<thead>
<tr>
<th>Tenure Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2 y</td>
<td>55%</td>
</tr>
<tr>
<td>2-4 y</td>
<td>27%</td>
</tr>
<tr>
<td>&gt;4 y</td>
<td>18%</td>
</tr>
</tbody>
</table>

Mandates outside the Novartis Group

According to article 34, paragraph 2 of the Articles of Incorporation (www.novartis.com/investors/company-overview/corporate-governance), the following limitations on mandates apply:

<table>
<thead>
<tr>
<th>Mandate Type</th>
<th>Maximum number of mandates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandates</td>
<td>6</td>
</tr>
<tr>
<td>Other listed companies¹</td>
<td>2</td>
</tr>
</tbody>
</table>

¹ Holding a chair position of the board of directors in other listed companies is not allowed.

According to article 34, paragraph 3 of the Articles of Incorporation, the following mandates are not subject to the above-mentioned limitations:

<table>
<thead>
<tr>
<th>Mandate Type</th>
<th>Maximum number of mandates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandates held at the request of Novartis AG or companies controlled by it</td>
<td>5</td>
</tr>
<tr>
<td>Mandates in associations, charitable organizations, foundations, trusts and employee welfare foundations</td>
<td>10</td>
</tr>
</tbody>
</table>

“Mandates” means those in the supreme governing body of a legal entity that is required to be registered in the commercial register or a comparable foreign register. Mandates in different legal entities that are under joint control are deemed to be one mandate.
Members of the Executive Committee

Vasant (Vas) Narasimhan, M.D.
Chief Executive Officer of Novartis since 2018 | Nationality: American | Year of birth: 1976

Professional experience
- Global Head of Drug Development and Chief Medical Officer, Novartis AG, Switzerland (2016–2018)
- Global Head of Development, Novartis Pharmaceuticals, Switzerland (2014–2016)
- Global Head of Biopharmaceuticals and Oncology Injectables, Sandoz International, Germany (2014)
- Joined Novartis in 2005

Mandates
- Member, National Academy of Medicine, US
- Chair (since December 2022) and board member (2020–2022), African Parks Network, South Africa
- Committee member, Biopharmaceutical CEOs Roundtable (BCR), International Federation of Pharmaceutical Manufacturers & Associations (IFPMA), Switzerland
- Member of the board of fellows, Harvard Medical School, US
- Board member and treasurer, Pharmaceutical Research and Manufacturers of America (PhRMA), US

Education
- Doctor of medicine, Harvard Medical School, US
- Master’s degree in public policy, John F. Kennedy School of Government, Harvard University, US
- Bachelor’s degree in biological sciences, University of Chicago, US

Shreeram Aradhye, M.D.
President, Global Drug Development & Chief Medical Officer since May 16, 2022 | Nationality: American | Year of birth: 1962

Professional experience
- Executive Vice President & Chief Medical Officer, Dicerna Pharmaceuticals, US (2020–March 2022)
- Executive Vice President & Chief Development Officer, Axcella Health, US (2019–2020)
- Global Head, Medical Affairs and Chief Medical Officer, Pharmaceuticals, Novartis, US & Switzerland (2017–2019)
- Executive Global Program Head, Multiple Sclerosis, Novartis, Switzerland (2012–2013)
- Head, Global Development India, Novartis, India (2011–2012)
- Head, Global Clinical Development & Medical Affairs, Biosimilars, Sandoz, Germany (2009–2011)
- Joined Novartis in 1999 holding positions of increasing responsibility

Education
- Chief Resident and Teaching Fellow in Internal Medicine, Newton Wellesley Hospital, US
- Resident in Internal Medicine, Newton Wellesley Hospital, US
- Fellow in Nephrology, St Luke’s Roosevelt Medical Center, US
- Resident in Internal Medicine (M.D.), All India Institute of Medical Sciences, India
- Bachelor of Medicine and Bachelor of Surgery, All India Institute of Medical Sciences, India

Victor Bulto
President, Innovative Medicines US since April 4, 2022 | Member of the Executive Committee as of May 1, 2022 | Nationality: Spanish | Year of birth: 1978

Professional experience
- President, Novartis Pharmaceuticals Corporation, US (2019–April 2022)
- Vice President & Head US Immunology & Dermatology Franchise, US (2017–2019)
- Head Neuroscience Franchise, Region Europe, Novartis, Switzerland (2013–2016)
- Business Franchise Head Neuroscience, Novartis, Spain (2012–2013)
- Business Franchise Head Neuroscience/MS, Respiratory, Osteoarticular, Spain, Novartis (2010–2012)
- Marketing Head Respiratory, Osteoarticular, Novartis, Spain (2009–2010)

Mandates
- Board member, Biotechnology Innovation Organization (BIO), US

Education
- Master of business administration, ESADE Business School, Spain
- Master’s degree in health economics and pharmacoconomics, Pompeu Fabra University Spain
- Master’s degree in chemical engineering, Ramon Llull University, Spain
- Bachelor’s of science degree in chemistry, Ramon Llull University, Spain
Aharon (Ronny) Gal, Ph.D.
Chief Strategy & Growth Officer since July 18, 2022 | Nationality: Israeli/American | Year of birth: 1966

**Professional experience**
- Senior analyst, US biopharmaceutical, Sanford Bernstein, US (2020–June 2022)
- Senior analyst, US specialty pharmaceuticals and EU mid-cap pharmaceuticals, Sanford Bernstein, US, UK (2013–2016)

**Mandates**
- Scientific advisor, Pure Honey Technologies, US

**Education**
- Ph.D. in Biochemistry, Massachusetts Institute of Technology, US
- B.Sc. in Chemistry, Emory University, US

Karen L. Hale
Chief Legal Officer of Novartis since May 15, 2021 | Nationality: American | Year of birth: 1968

**Professional experience**
- Vice president, litigation and legal specialty operations, AbbVie Inc., US (2013)
- Began practicing law in 1994 and joined Abbott in 1997

**Education**
- Bar memberships: Illinois and Virginia, US
- Juris doctor, William & Mary Law School, US
- Bachelor’s degree in economics, Duke University, US

Harry Kirsch
Chief Financial Officer of Novartis since 2013 | Nationality: German/Swiss | Year of birth: 1965

**Professional experience**
- Chief Financial Officer of the Pharmaceuticals Division (now known as the Innovative Medicines Division), Novartis Pharmaceuticals, Switzerland (2010–2013)
- Chief Financial Officer of Pharma Europe, Novartis Pharmaceuticals, Switzerland (2008–2010)
- Head of Business Planning & Analysis for the Pharmaceuticals Division, Novartis Pharmaceuticals, Switzerland (2005–2008)
- Joined Novartis in 2003 as Head Finance Global Primary Care, and over the years held positions of increasing responsibility within Finance

**Mandates**

**Education**
- Diploma degree in industrial engineering and economics, University of Karlsruhe, Germany

Robert (Rob) Kowalski
Chief People & Organization Officer of Novartis since September 1, 2021 | Nationality: American | Year of birth: 1968

**Professional experience**
- Ad interim President, Novartis Corporation, US (2021)
- Ad interim Head of Global Drug Development and Chief Medical Officer, Novartis AG, Switzerland (2018)
- Senior Vice President and Head of Regulatory Affairs, Novartis Pharmaceuticals Corporation, US (2009–2015 and 2017–2018)
- Senior Vice President and Head of Regulatory Affairs, Novartis Pharma AG, Switzerland (2015–2017)
- Previously held regulatory leadership roles at Schering-Plough Corporation (now Merck) and Pharmacia Corporation (now Pfizer)

**Mandates**
- Member of the advisory board, Industry Pharmacists Organization, US

**Education**
- Doctor of pharmacy, University of Wisconsin-Madison, US
- Bachelor of Science in pharmaceutical sciences, University of Wisconsin-Madison, US
Steffen Lang, Ph.D.
President, Operations since April 4, 2022 | Nationality: German/Swiss | Year of birth: 1967

**Professional experience**
- Global Head of Novartis Technical Operations (NTO), Switzerland (2017–April 2022)
- Global Head of Technical Research and Development, Novartis Pharmaceuticals, Switzerland (2009–2015)
- Joined Novartis in 1994 as Head of Laboratory in Research, and over the years held positions of increasing responsibility within Pharmaceuticals Development

**Mandates**
- Board member, Bachem Holding AG, Switzerland

**Education**
- Doctorate in pharmaceutical technology, Swiss Federal Institute of Technology, Switzerland
- Master’s degree in pharmaceutical sciences, University of Heidelberg, Germany

Fiona H. Marshall, Ph.D.
President, Novartis Institutes for BioMedical Research (NIBR) since November 1, 2022 | Nationality: British | Year of birth: 1964

**Professional experience**
- Senior vice president, head of discovery, preclinical and translational medicine, Merck & Co., US, (2021–September 2022)
- Vice president, global head of neuroscience, Merck & Co., US (2019–2021)
- Vice president, head of UK discovery research, Merck & Co., UK (2018–2019)
- Executive vice president and chief scientific officer, Sosei Heptares, UK (2015–2018)
- Chief scientific officer and founder, Heptares Therapeutics, UK (2006–2018)

**Mandates**
- Member of the Scientific Advisory Board, SciLifeLab, Sweden
- Fellow, Royal Society, UK
- Honorary Fellow, Royal Society of Chemistry, UK
- Honorary Fellow, British Pharmacological Society, UK
- Fellow, UK Academy of Medical Sciences, UK
- Fellow, Royal Society of Biology, UK

**Education**
- PhD in Neuroscience, University of Cambridge, UK
- BSc in Biochemistry, University of Bath, UK

Klaus Moosmayer, Ph.D.
Chief Ethics, Risk & Compliance Officer of Novartis since 2018 | Nationality: German | Year of birth: 1968

**Professional experience**
- Chief compliance officer, Siemens AG, Germany (2014–2018)
- Chief counsel compliance, Siemens AG, Germany (2009–2013)
- Compliance operating officer, Siemens AG, Germany (2007–2009)

**Mandates**
- Board member, SwissHoldings, the Swiss federation representing Swiss-based multinational companies, Switzerland
- Member of the executive board, Business at OECD (BIAC), Paris
- Co-chair, B20 Integrity & Compliance Task Force under the G20 presidencies of Indonesia (2022), Italy (2021), Saudi Arabia (2020), Argentina (2018), and Chair of the Task Force under the G20 presidency of Germany (2017)
- Member of the advisory panel, Pharmaceutical Supply Chain Initiative, US
- Co-founder and board member, European Chief Compliance and Integrity Officers’ Forum
- Chair of the Anti-Corruption Committee of the Business and Industry Advisory Committee (BIAC), Organization for Economic Co-operation and Development (OECD), Paris (2013–2020)

**Education**
- First and second state examination in law, Germany
- Doctor of jurisprudence, University of Freiburg, Germany

Marie-France Tschudin
President, Innovative Medicines International & Chief Commercial Officer since April 4, 2022 | Nationality: Swiss | Year of birth: 1971

**Professional experience**
- President, Novartis Pharmaceuticals, Switzerland (2019–April 2022)
- President, Advanced Accelerator Applications, France (2019)
- Europe Region Head, Novartis Pharmaceuticals, Switzerland (2017–2019)
- Corporate vice president of hematology and oncology for Europe, the Middle East and Africa, Celgene International, Switzerland (2014–2016)
- Regional vice president of northern Europe, Celgene International, Switzerland (2012–2014)
- General manager of Austria, Switzerland, the Czech Republic, Poland, Slovenia and Slovakia, Celgene International, Switzerland (2009–2011)

**Mandates**
- Board member, IMD Foundation, Switzerland
- Board member, AXA, France
- Board member, European Federation of Pharmaceutical Industries and Associations (EFPIA), Belgium

**Education**
- Master of Business Administration, IMD business school, Switzerland
- Bachelor of Science, Georgetown University, US
Information and control systems

The Board’s information and control systems vis-à-vis management include a steady flow of information from senior management; monthly financial reports; a comprehensive and integrated risk management framework; and the independent evaluation of our risk management and internal control framework by the Internal Audit function (see “Item 15. Controls and Procedures”).

Information from senior management

The Board ensures that it receives sufficient information from the Executive Committee through:

• Monthly CEO reporting (including detailed written updates from each division and business unit head), frequent communications from the CEO on current developments, and a yearly presentation
• Executive Committee meeting minutes
• Regular meetings and teleconferences by the Board and/or Board committees with the CEO and/or other members of the Executive Committee (e.g., the CFO, the Chief Legal Officer, the Chief Ethics, Risk & Compliance Officer), and regular meetings and teleconferences with senior management (e.g., the Chief Audit Officer)
• Information from Executive Committee members or other Novartis employees, and visits to Novartis sites

To get an outside view, the Board and/or Board committees occasionally invite external advisors (e.g., the independent advisor of the Compensation Committee, the external auditor) to attend a meeting and/or share their observations about a specific topic.

Monthly financial reports

Novartis produces comprehensive, consolidated (unaudited) financial statements on a monthly basis for the Group and its operating divisions. These are typically available within 10 days after the end of the month, and include the following:

• Consolidated income statement of the month and year to date, in accordance with International Financial Reporting Standards (IFRS), as well as adjustments to arrive at core results, as defined by Novartis (see “Item 5. Operating and Financial Review and Prospects—Item 5.A Operating results—Non-IFRS measures as defined by Novartis”). The IFRS and core figures are compared with the prior-year period and targets in both USD and on a constant currency basis.
• Supplementary data on a monthly and year-to-date basis, such as free cash flow and earnings per share on a USD basis

Management information related to the consolidated income statements and free cash flow is made available to Board members through the monthly CEO Report, which includes an analysis of key deviations from the prior year or target.

Prior to the release of each quarter’s results, the Board receives the actual consolidated financial statement information and an outlook of the full-year results in accordance with IFRS and core results (as defined by Novartis), together with related commentary.

Annually, in the middle of the year, the Board approves the Company’s strategic plan for the next three years. In the fourth quarter of the year, the Board approves the operating targets for the following year as well as the financial targets for the following three-year period, including a projected consolidated income statement in USD prepared in accordance with IFRS and non-IFRS measures as defined by Novartis (core results).

The Board does not have direct access to the Novartis financial and management reporting systems but can, at any time, request more detailed information.
Risk management

Overview
At Novartis, our continued success depends on our ability to manage risk. Our Board has ultimate oversight of the Enterprise Risk Management (ERM) system and regularly reviews the most significant risks and how these risks are managed. As explained further below, the Board is supported by its committees. Furthermore, our Internal Audit function provides an independent evaluation of risk management (see “—Item 6.C Board practices—Information and control systems—Internal Audit”).

BOARD COMMITTEES

RISK COMMITTEE
• Oversees the risk management system and processes
• Reviews, together with management, the prioritization and handling of risks, the risk portfolio, and actions implemented by management
• Performs deep dives into key risk areas and fosters a culture of smart risk-taking
• Receives updates on cyber security on an annual basis
• Receives regular updates from designated risk owners as well as the Chief Ethics, Risk & Compliance Officer and/or the Head of Risk & Resilience

AUDIT AND COMPLIANCE COMMITTEE
• Ensures that Internal Audit plans are aligned with key risks, and that the function provides independent assurance and insights around these risks
• Works closely with the Risk Committee to minimize gaps in risk coverage
• Receives a semiannual presentation from the Chief Ethics, Risk & Compliance Officer
• Receives a quarterly presentation from the Chief Audit Officer on progress achieved in implementing the risk-based audit plan, and key insights about audit and advisory activities
• Pays particular attention to financial risk
• Has closed sessions with the Chief Audit Officer and, upon request, with the Chief Ethics, Risk & Compliance Officer

COMPENSATION COMMITTEE
• Works closely with the Risk Committee to ensure that the compensation system does not lead to excessive risk-taking (see “—Item 6.B Compensation—Compensation governance—Risk management principles”)

EXECUTIVE COMMITTEE OF NOVARTIS
• Regularly assesses risks and fosters a culture of risk awareness, in line with the Novartis Values and Behaviors and the Novartis Code of Ethics

ETHICS, RISK & COMPLIANCE
• Governs the Novartis Code of Ethics
• Provides an integrated ERM framework (further described in the following section)
• Governs the global compliance program within Novartis
• Administers the Enterprise Policy Management and global Internal Controls framework

SENIOR LEADERS OF DIVISIONS, ORGANIZATIONAL UNITS AND GROUP FUNCTIONS, AT ALL LEVELS
• Provide appropriate risk management within their area of responsibility
• Establish adequate risk prevention and mitigation strategies when risk exposure is identified, including tracking progress and providing resources for possible actions
• Assess emerging risks, trends and overall exposure as part of the ERM process

Enterprise Risk Management framework
The Ethics, Risk & Compliance (ERC) function provides an integrated ERM framework to obtain a holistic view of Company risks and drive a culture of smart risk-taking. Under the leadership of the Chief Ethics, Risk & Compliance Officer, the Risk & Resilience team is responsible for the overall ERM process. This process covers, but is not limited to, risks associated with:
• The research, development, manufacturing, marketing and sales of products
• Finance, taxes, intellectual property, compliance with law and regulations, security, product safety, human resources, and health, safety and environmental protection
• Business objectives and strategies, including mergers and acquisitions
• External factors such as the social, political and economic environment

The ERM process continued to evolve in 2022. The Risk & Resilience team conducted risk workshops and collaborated with all risk assurance and monitoring functions to identify key risks across the Company. Each Novartis unit organized a focused risk workshop at the leadership team level. In parallel, risk workshops were held in the top 11 countries (by revenue) and in certain focus markets. Once key risks were identified, mitigation action plans were created to address them in an effective way. The findings from these workshops were consolidated into the Novartis Risk Compass, which enables senior management, the Executive Committee and the Board to focus discussions on key risks and more closely align our corporate strategy with our risk exposure and ways of working.

In 2022, we further matured our ERM framework within the Novartis Risk & Resilience organization, developed additional risk management trainings, and integrated other critical risk management functions (like Third-Party Risk Management and Health, Safety and Environment) into the Risk & Resilience department. Furthermore, the Enterprise Policy & Internal Control team is progressing as planned to create a holistic framework, and the Central Monitoring Coordination team is expanding its scope to ensure a harmonized and coordinated monitoring process across the Company.

SpeakUp Office
Our SpeakUp Office provides a safe place for employees to report potential misconduct, including the option to do so anonymously.

Global Security
Global Security proactively collects and shares threat intelligence to protect Novartis from situations that may compromise the safety of people, products and assets, and/or the reputation of our organization. Global Security protects patients from counterfeit products and, as part of the SpeakUp process, performs fair and timely investigations into high-risk cases of alleged internal misconduct. It also provides personal security advice and support for Novartis executives and other employees with the utmost discretion.
Internal Audit

The purpose of Internal Audit is to assist the Board and the Executive Committee in discharging their governance responsibilities by providing independent assurance and advice on the effectiveness, efficiency and adequacy of processes and controls that support Novartis in achieving its objectives, managing its major risks, and ensuring compliance with applicable policies, laws and regulations.

The Chief Audit Officer reports administratively to the CEO, and functionally to the chair of the Audit and Compliance Committee (ACC). The Chief Audit Officer meets with the ACC at least once a quarter and confirms the organizational independence of the Internal Audit function to the ACC on an annual basis.

In 2022, our Internal Audit function executed a risk-based audit plan and reported the results to the audited units, the Executive Committee and the ACC. Audit findings and action plans are stored and monitored in a single location to enable efficient and effective follow-up. The following outlines the number of audits, internal reviews and advisories performed in 2022, and key methodology steps when managing the Internal Audit cycle.

2022 INTERNAL AUDIT ACTIVITIES

- **AUDITS**
  - 41

- **INTERNAL REVIEWS**
  - 14

- **ADVISORIES**
  - 8

Internal Audit performed 85% of planned activities (equating to 63 of 74 engagements) in 2022, conducted under a hybrid model of engagement delivery, choosing between remote and in-person auditing based on the engagement scope and COVID-19 situation within the audited entity.
Auditors

Duration of the mandate and terms of office

On behalf of the Board, the ACC selects and nominates an independent auditor for election at the AGM. KPMG commenced its auditing mandate for Novartis in 2022. Richard Broadbelt, Auditor in charge, and Sara Burke, Global Audit Partner, began serving in their roles in 2022. The ACC together with KPMG will ensure that these partners are rotated at least every five years.

Auditing fees and additional fees

The ACC monitors and preapproves the fees paid to the external auditor for all audit and non-audit services. It has developed and approved a policy with clear guidelines on the engagement of the independent auditor firm. This policy is designed to help ensure that the independence of the external auditor is maintained. It limits the scope of services that the external auditor may provide to the Group, stipulating certain permissible types of audit-related and non-audit services, including tax services and other services that have been preapproved by the ACC. The ACC preapproves all other services on a case-by-case basis.

The external auditor is required to report periodically to the ACC about the scope of the services it has provided to the Group and the fees for the services it has performed to date. KPMG fees for professional services related to the 12-month period ended December 31, 2022, and PwC fees for professional services related to the 12-month period ended December 31, 2021, are as follows:

<table>
<thead>
<tr>
<th></th>
<th>2022 USD million</th>
<th>2021 USD million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit services</td>
<td>22.5</td>
<td>22.2</td>
</tr>
<tr>
<td>Audit-related services</td>
<td>0.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Tax services</td>
<td>1.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Other services</td>
<td>0.0</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24.4</strong></td>
<td><strong>25.2</strong></td>
</tr>
</tbody>
</table>

Audit services include work performed to issue opinions on consolidated financial statements and parent company financial statements of Novartis AG, to issue opinions related to the effectiveness of the Group’s internal control over financial reporting, and to issue reports on local statutory financial statements. Also included are audit services that generally can only be provided by the statutory auditor, such as the audit of the Compensation Report, audits of the adoption of new accounting policies, audits of information systems and the related control environment, as well as reviews of quarterly financial results.

Audit-related services include other assurance services provided by the independent auditor but not restricted to those that can only be provided by the statutory auditor. They include services such as: audits of pension and other employee benefit plans; audits in connection with non-recurring transactions; contract audits of third-party arrangements; corporate responsibility assurance; and other audit-related services.

Tax services include tax compliance, assistance with historical tax matters, and other tax-related services.

Other services in 2021 included procedures related to corporate integrity agreements, benchmarking studies, and license fees for use of accounting and other reporting guidance databases.

Information to the Board and the ACC

The ACC, acting on behalf of the Board, is responsible for overseeing the activities of the external auditor. In 2022, this committee held seven meetings. KPMG was invited to all of these meetings to attend the discussions on auditing matters and any other matters relevant to its audit.

The ACC recommended to the Board to approve the audited consolidated financial statements and the separate parent company financial statements of Novartis AG for the year ended December 31, 2022. The Board proposed the acceptance of these financial statements for approval by the shareholders at the next AGM.

The ACC regularly evaluates the performance of the external auditor and, based on this, once a year determines whether the external auditor should be proposed to the shareholders for re-election. To assess the performance of the external auditor, the ACC requests input from management and holds private meetings with the CFO and the Chief Audit Officer and, if necessary, obtains an independent external assessment. Criteria applied for the performance assessment of the external auditor include an evaluation of: its technical and operational competence; its independence and objectivity; the sufficiency of the resources it has employed; its focus on areas of significant risk to Novartis; its willingness to probe and challenge; its ability to provide effective, practical recommendations; and the openness and effectiveness of its communications and coordination with the ACC, the Internal Audit function and management.

Once a year, the Auditor in charge and the Global Audit Partner report to the Board on the external auditor’s activities during the current year, and on the audit plan for the coming year.

On an annual basis, the external auditor provides the ACC with written disclosures required by the US Public Company Accounting Oversight Board, and the committee and the external auditor discuss the external auditor’s independence from Novartis.
Novartis is committed to open and transparent communication with shareholders, investors, financial analysts, customers, suppliers and other stakeholders. Novartis disseminates information about material developments in its businesses in a broad and timely manner that complies with the rules of the SIX Swiss Exchange and the NYSE.

**Communications**

Novartis publishes this Annual Report to provide information on the Group’s results and operations. Novartis discloses financial results in accordance with IFRS on a quarterly basis, and issues press releases from time to time regarding business developments.


Novartis also publishes a Novartis in Society Integrated Report, available at www.reporting.novartis.com, which highlights progress on the Company’s strategic priorities and describes how Novartis creates value for diverse stakeholders. The Novartis in Society Integrated Report has been prepared in alignment with the Integrated Reporting Framework (part of the IFRS Foundation), the Task Force on Climate-related Financial Disclosures (TCFD), the Sustainability Accounting Standards Board (SASB) and the latest non-financial standards issued by the Global Reporting Initiative (GRI). It also contains our main disclosures against the Company’s reporting requirement as a signatory of the United Nations Global Compact.

**Investor Relations**

Investor Relations manages the Group’s interactions with the international financial community. Several events are held each year to provide institutional investors and analysts with various opportunities to learn more about Novartis.

Investor Relations is based at the Group’s headquarters in Basel. Part of the team is located in the US to coordinate interaction with US investors. More information is available at www.novartis.com/investors.

**Website information**

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<td>(including Novartis investor event calendar, registered office, contact and email addresses, phone numbers, etc.)</td>
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According to our Global Insider Policy, employees who have access to material non-public information on a regular basis are designated as Continuing Insiders and are banned from trading in Novartis securities during quiet periods. Limited exemptions for the expiry of options or warrants within a quiet period apply. Until June 14, 2022, our quarterly quiet periods commenced at the beginning of the last trading day of each calendar quarter and ended at the beginning of the first trading day after the subsequent release of the quarterly and/or annual results. Effective June 15, 2022, our quarterly quiet periods commence on the first trading day of each calendar quarter and end at the beginning of the first trading day after the subsequent release of the quarterly and/or annual results.

In 2022, the following quiet periods applied:
- December 30, 2021, until (and including) February 2, 2022
- March 31, 2022, until (and including) April 26, 2022
- July 1, 2022, until (and including) July 19, 2022
- October 1, 2022, until (and including) October 25, 2022