Meet Novartis Management

Novartis Investor Relations

September 22, 2022
Disclaimer

This presentation contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995. Forward-looking statements can generally be identified by words such as "potential," "can," "will," "plan," "may," "could," "would," "expect," "anticipate," "seek," "believe," "committed," "investigational," "pipeline," "launch," or similar terms, or by express or implied discussions regarding the potential completion of the proposed spin-off of Sandoz; regarding the future commercial performance of Novartis or of Sandoz; regarding any potential strategic benefits, synergies or opportunities as a result of the proposed spin-off; regarding discussions of strategy, plans, expectations or intentions; regarding our ability to deliver improved financial results, continuing development of to successfully launch new products and new indications for existing products, to deliver high value innovation, or improve access to patients; or regarding potential benefits resulting from our organizational changes announced in April. You should not place undue reliance on these statements. Such forward-looking statements are based on our current beliefs and expectations regarding future events, and are subject to significant known and unknown risks and uncertainties. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those set forth in the forward-looking statements. There can be no guarantee that the proposed spin-off will be completed in the expected form or within the expected time frame or at all. Nor can there be any guarantee that Novartis or a separate Sandoz business will be able to realize any of the potential strategic benefits, synergies or opportunities as a result of these actions. Neither can there be any guarantee that shareholders will achieve any particular level of shareholder returns. Nor can there be any guarantee that the proposed spin-off of Sandoz will maximize value for shareholders, or that Novartis or any of its divisions, or a separate Sandoz business, will be commercially successful in the future, or achieve any particular credit rating or financial results. Neither can there be any guarantee that we will be able to improve our financial results, successfully launch new products and new indications for existing products, deliver high value innovation or improve access to patients. Nor can there be any guarantee that our organizational changes announced in April will realize any or all of the expected benefits, or within any particular time frame. In particular, our expectations could be affected by, among other things: an unexpected failure to complete, or unexpected delays in completing, the necessary actions for the proposed spin-off, or to obtain the necessary approvals to complete these actions; the potential strategic benefits, synergies or opportunities expected from the proposed spin-off may not be realized or may take longer to realize than expected; regulatory actions or delays or government regulation generally; the inherent uncertainty in predicting shareholder returns; the successful separation of Sandoz from Novartis and the timing of such separation; potential adverse reactions to the proposed spin-off by customers, suppliers, strategic partners or key Sandoz personnel and potential difficulties in maintaining relationships with such persons; a failure to improve our financial results, to successfully launch new products and new indications for existing products, to deliver high value innovation, or to improve access to patients; the uncertainties inherent in research and development, including clinical trial results and additional analysis of existing clinical data; global trends toward health care cost containment, including government, payor and general public pricing and reimbursement pressures and requirements for increased pricing transparency; our ability to obtain or maintain proprietary intellectual property protection; the particular prescribing preferences of physicians and patients; general political, economic and business conditions, including the effects of and efforts to mitigate pandemic diseases such as COVID-19; safety, quality, data integrity or manufacturing issues; potential or actual data security and data privacy breaches, or disruptions of our information technology systems, and other risks and factors referred to in Novartis AG’s current Form 20-F on file with the US Securities and Exchange Commission. Novartis is providing the information in this presentation as of this date and does not undertake any obligation to update or any forward-looking statements contained in this presentation as a result of new information, future events or otherwise.

Implementation of the proposed separation of Sandoz by way of a 100% spin-off is subject to certain conditions, including Novartis shareholder approval and applicable Novartis Euroforum and local employee information and/or consultation.

Nuplazid® is a registered trademark of Acadia Pharmaceuticals Inc. Aduhelm® is a registered trademark of Biogen.
New Novartis: Our strategy

Deliver high-value medicines that alleviate society’s greatest disease burdens through technology leadership in R&D and novel access approaches

Our focus

5 core Therapeutic Areas
Cardiovascular, Immunology, Neuroscience, Solid Tumors, Hematology

2+3 technology platforms
Chemistry, Biotherapeutics
xRNA, Radioligand, Gene & Cell Therapy

4 priority geographies
US, China, Germany, Japan

Our priorities

Accelerate growth
Deliver high-value medicines (including launch excellence)

Deliver returns
Embed operational excellence

Strengthen foundations
Unleash the power of our people
Scale data science and technology
Build trust with society

1. Other TAs opportunistically
Focused Innovative Medicines company consistently delivering strong operational performance

- Pre-portfolio transformation (2014)
- Pre-Alcon spin-off (2017)
- Post-Alcon spin-off (2019)
- Post-Sandoz spin-off (2023)

### IM Sales
USD billion, %CAGR cc

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2016</td>
<td>31.8</td>
<td></td>
</tr>
<tr>
<td>FY 2021</td>
<td>42.0</td>
<td></td>
</tr>
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</table>

- +6%

### IM Core Oplnc
USD billion, %CAGR cc

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2016</td>
<td>10.1</td>
<td></td>
</tr>
<tr>
<td>FY 2021</td>
<td>15.2</td>
<td></td>
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</table>

- +10%

### IM Core Margin
%

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2016</td>
<td>31.6</td>
<td></td>
</tr>
<tr>
<td>FY 2021</td>
<td>36.2</td>
<td></td>
</tr>
</tbody>
</table>
Our focus

Core Therapeutic Areas
Technology platforms
Priority geographies
Capital allocation / structure

Our priorities
Conclusion
Abbreviations
**Focused on 5 core Therapeutic Areas...**

### Select examples

<table>
<thead>
<tr>
<th>Disease areas</th>
<th>Cardiovascular</th>
<th>Immunology</th>
<th>Neuroscience</th>
<th>Solid Tumors</th>
<th>Hematology</th>
</tr>
</thead>
</table>
|               | • Heart failure & hypertension  
• Atherosclerosis | • Psoriasis  
• Psoriatic arthritis  
• Spondylitis/Spondylarthritis  
• Hidradenitis suppurativa  
• CSU  
• Sjögren’s / SLE / LN | • Multiple sclerosis  
• Spinal muscular atrophy  
• Neurodegeneration, incl. Huntington’s, Parkinson’s, ALS | • Breast and Women’s cancer  
• Prostate cancer  
• Lung cancer | • Non-Hodgkin’s lymphoma  
• Non-malignant hematological - Immune thrombocytopenia  
• Acute myeloid leukemia / Myelodysplastic syndrome |

### Commercial assets

- **Cardiovascular**
  - Iptacopan (LNP023)  
  - C3G, IgAN

- **Immunology**
  - Cosentyx  
  - Multiple indications

- **Neuroscience**
  - Remibrutinib (LOU064)  
  - MS

- **Solid Tumors**
  - Kisqali  
  - Adjuvant HR+HER2- BC

- **Hematology**
  - Iptacopan (LNP023)  
  - PNH, aHUS

### Pipeline assets and opportunities

- **Pelacarsen (TQJ230)**  
  - CVRR-Lp(a)

- **Remibrutinib (LOU064)**  
  - CSU

- **Zolgensma (AVXS-101 IT)**  
  - SMA IT

- **TNO155, JDQ433**  
  - NSCLC; Colorectal Cancer; Combos

- **Ianalumab (VAY736)**  
  - Sjögren’s, SLE, LN

- **Branaplam (LMI070)**  
  - Huntington’s

- **NIS793**  
  - 1L mPDAC / 1L mCRC

- **Ianalumab (VAY736)**  
  - Multiple indications

- **Ligelizumab (QGE031)**  
  - Food Allergy

- **YTB323**  
  - DLBCL

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TA-x (incl. Ophtha, Resp and other assets) not included in the above list. Pelacarsen is licensed from Ionis Pharmaceuticals, Inc.
...with the largest growth potential and existing Novartis expertise

**TA size and growth contribution**


<table>
<thead>
<tr>
<th>Therapeutic Area</th>
<th>2022 Market Size ($bn)</th>
<th>Expected Growth (% CAGR 2022-27)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Oncology</td>
<td></td>
<td></td>
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<tr>
<td>B Central Nervous System1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C Immunology (incl. Dermatology)</td>
<td></td>
<td></td>
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<tr>
<td>D Cardiovascular</td>
<td></td>
<td></td>
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<tr>
<td>E Endocrine²</td>
<td></td>
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<tr>
<td>F Blood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G Respiratory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H Gastro-Intestinal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I Sensory Organs</td>
<td></td>
<td></td>
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<tr>
<td>J Genito-Urinary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K Systemic Anti-Infectives</td>
<td></td>
<td></td>
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<tr>
<td>L Musculoskeletal</td>
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</tbody>
</table>

Source: Evaluate Pharma (July 15, 2022). Note: Chart excludes ‘Various’ and ‘Other Rx and OTC Pharma’ segments; EvaluatePharma data not pro-forma for Consumer Health business separation for J&J and GSK.

1. Reflects latest setbacks in Alzheimer’s trials (Aethira Pharma’s fosgonimeton), FDA’s negative opinion for Acadia’s Nuplazid®, failed launch of Biogen’s Aduhelm®, and failed readout of Roche’s crenezumab. 2. Includes obesity.

**Within each Therapeutic Area**

- Clear disease area priorities
- Promising lead assets
- Focus on lifecycle management
Strong positioning in Cardiovascular, the leading cause of death and disability

Novel approaches that aim to improve HF outcomes

Dyslipidemia treatments that improve CV morbidity/mortality in identifiable high-risk groups with high unmet need

Population health approach, initially with NHS agreement for broad and rapid access to Leqvio®

Chronic and acute renal specialty indications with high unmet need and limited/no targeted therapies

Disease modifying therapies for metabolic disorders

Selected compound (indication) | Phase 1 | Phase 2 | Phase 3 | Registration
--- | --- | --- | --- | ---
Leqvio® (Hyperlipidemia) | | | | full
Leqvio® (CVRR-LDLC) | | | | full
Leqvio® (Primary prevention)
Pelacarsen (Lp(a)) | | | | full
XXB750 (Cardiovascular diseases) | | | | full
Iptacopan (IgAN) | | | | full
Iptacopan (C3G) | | | | full
Iptacopan (iMN) | | | | full
Iptacopan (Others) | | | | full
TIN816 (S-AKI)
MBL949 (Obesity) | | | | full

Disease area
- Cardio
- Renal
- Metabolic

Note: Bars in Gantt chart indicate current phase of development. 1. Phase 3 not yet started. 2. Phase 2 initiating.
**Full pipeline across Immunology** covering **Rheumatology, Dermatology and Allergy**

**Focus on areas of high unmet need in Rheumatology, Dermatology and Allergy:**
Sjögren’s, Osteoarthritis, Food Allergy, Hidradenitis Suppurativa, Lupus Nephritis, Atopic Dermatitis

**Developing novel and differentiated MoAs:**

- **Ianalumab:** Fully human monoclonal antibody binding to and blocking the function of the BAFF receptor
- **Remibrutinib:** Oral, covalent BTK inhibitor targeting immune cell signaling

<table>
<thead>
<tr>
<th>Disease area</th>
<th>Selected compound (indication)</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Registration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rheumatology</strong></td>
<td>Cosentyx® (300 mg AI)</td>
<td></td>
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<tr>
<td></td>
<td>Cosentyx® (IV PsA/IV axSpA/LN/GCA)</td>
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<td></td>
<td>Ianalumab (Sj/SLN)</td>
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<tr>
<td></td>
<td>Ianalumab (SLE)</td>
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<td></td>
<td>LNA043 (Knee OA)</td>
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<tr>
<td></td>
<td>Remibrutinib (SjS)</td>
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<tr>
<td></td>
<td>MHV370 (SjS/SLE)</td>
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<tr>
<td><strong>Dermatology</strong></td>
<td>Cosentyx® (HS)</td>
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<tr>
<td></td>
<td>Remibrutinib (CSU)</td>
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<tr>
<td><strong>Allergy</strong></td>
<td>Cosentyx® (LP)</td>
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<tr>
<td></td>
<td>Remibrutinib (HS)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>MAS825 (HS)</td>
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<td></td>
<td>Xolair® (FA)</td>
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<tr>
<td></td>
<td>Ligelizumab (FA)</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Remibrutinib (FA)</td>
<td></td>
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</tr>
</tbody>
</table>

Note: Bars in Gantt chart indicate current phase of development. 1. Phase 2 initiating.
Leadership across 3 next-generation technology platforms...

Shift towards biologics and advanced technology platforms

Proportion % of IM sales by platform
Outlook illustrative

2020
5%

22%

73%

2030
Expand platforms
Scale biologics
Focus on new approaches to address previously intractable targets (e.g. TPD)

Leadership across 3 next-generation technology platforms

<table>
<thead>
<tr>
<th>Gene &amp; Cell therapy</th>
<th>RLT</th>
<th>xRNA¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gene</td>
<td>Cell</td>
<td></td>
</tr>
<tr>
<td>zolgensma</td>
<td>KYMRIAH</td>
<td>LUTHATHERA</td>
</tr>
</tbody>
</table>

Existing commercial assets

Key focus
Novel cargos, targeting & switchable expression
Next generation of CAR-Ts & manufacturing efficiency
Additional solid tumors
Build up siRNA capabilities & explore new approaches in RNA

# of projects²
19 14 9 11

Expected next filing
2025 2025 2023 2025

1. xRNA includes RNA targeting LMWs, ASOs, miRNA cancer vaccines
2. Exploratory to Ph1/2 (July 2022)
... leveraging the strengths across our organization

**Depth and breadth across 2 + 3 platforms**
- ~70 projects¹

**Manufacturing scale and expertise**
- >30 manufacturing sites globally
- Strong supply chain delivering quality & safety (100% YTD favorable HA inspections)
- Meeting sustainability targets

**Development and regulatory experience**

**Global footprint**

**Commercialization expertise**
- Kymriah®
- Leqvrio®
- Pluvicto®
- Lutathera®
- Zolgensma®
- Luxturna®

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¹ Exploratory to Ph1/2

**2. Technology platforms**
Building the industry-leading RLT platform

**Established leadership in RLT**, category creator and positioned as the go-to partner for collaborations

**Robust manufacturing delivering safety and quality**
- 4 manufacturing facilities: Ivrea (Italy), Milburn (US), Zaragoza (Spain) & Indianapolis (US, opening 2023)
- **At scale** manufacturing & “just-in-time” production/delivery
- On track for additional non-carrier added isotope production

**Strong commercial execution**
with >500 centers and >16,000 patients treated

**Leading with the science**
- 4 ongoing registrational studies (next readout PSMAfore Q4’22)
- 8 dedicated early discovery projects

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<table>
<thead>
<tr>
<th>Selected compound (indication)</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lutathera (1L GEP-NET)</td>
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<tr>
<td>Lutathera (Pediatrics + PPGL)²</td>
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<tr>
<td>Lutathera (GBM)²</td>
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</tr>
<tr>
<td>Lutathera (ES-SCLC)²</td>
<td></td>
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</tr>
<tr>
<td>Pluvicto (mHSPC)</td>
<td></td>
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<tr>
<td>Pluvicto (mCRPC)</td>
<td></td>
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</tr>
<tr>
<td>225Ac-PSMA-617 (PCa+bone metastases)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NeoB (multi tumor)</td>
<td></td>
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</tbody>
</table>

1. PPGL, is an exploratory cohort of NETTER-P  
2. Phase 1/2
# Geographic focus - organically building the US to a top 5 player

## Priority geographies

<table>
<thead>
<tr>
<th>2021</th>
<th>2027 ambition</th>
</tr>
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<tbody>
<tr>
<td>🇺🇸 #10 &gt; #5</td>
<td><strong>How?</strong></td>
</tr>
<tr>
<td>🇪🇺 #1 &gt; #1</td>
<td></td>
</tr>
<tr>
<td>🇨🇳 #5 &gt; #3</td>
<td></td>
</tr>
<tr>
<td>🇪🇸 #4 &gt; #3</td>
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</tbody>
</table>

1. “US first” mindset for global functions/units (NIBR, GDD, IM)
2. Reporting directly into Executive Committee
3. US TPPs prioritized
4. Representation in all governance bodies
5. Focus on capability building & talent (incl. US focused talent in global roles)
6. Increase of US-patient share in trials

1. Priority geography - Germany  
2. Rank among pharmaceutical multinational companies
**Remain disciplined and shareholder focused in our capital allocation priorities**

**Investing in the business**
- Investments in organic business
  - USD 9bn R&D 2021¹
  - USD 1.4bn capital investments 2021
- Value-creating bolt-ons
  - USD 30bn (approx.) 2017-2021

**Returning to shareholders**
- Growing annual dividend in CHF
  - USD 7.5bn paid out in 2022; DPS increase of +3.3% CHF; +4.1% USD
- Share buybacks
  - USD 15bn ongoing, USD 8.2bn to be executed²

Sandoz separation is expected to have limited impact on our credit rating, providing continued flexibility for future capital allocations

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1. Core R&D actuals 2021  
2. As of August 31 2022
Our strong capital structure supports flexibility for strategic investments and distributions

Our strong capital structure positions us well within our peer group...

Credit rating positioning

... and the current low leverage provides flexibility for further capital allocation

Q2 2022 leverage (net debt / EBITDA)

Strong FCF generation coupled with strong balance sheet / low leverage provide flexibility for future value-creating bolt-on M&A or further shareholder distributions

Source: Bloomberg; ratings as of September 16, 2022; leverage calculated with net debt (gross debt incl. lease liabilities minus total liquidity) and trailing 12-month EBITDA
Our priorities

1. Improved financials
2. Launch excellence
3. High-value innovation
4. Operational excellence
5. Strengthen foundations
Continuing to deliver improved financials – sales, core margin, free cash flow and return on invested capital

New-Novartis expectations (illustrative only)

- Improved financials
- Launch excellence
- High-value innovation
- Operational excellence
- Strengthen foundations

IM expected to grow sales, margin and FCF (% of sales)
Margin targets includes absorbing corporate costs
Sandoz spin-off will result in incremental growth for:
  - Core operating income margin
  - FCF (% of sales)
  - Return on invested capital
New-Novartis remains committed to capital allocation priorities, with growing (CHF) annual dividend
Existing in-market brands with multi-bn potential are the foundations

Q2 2022 sales annualized
Q2 growth in cc

- **Cosentyx®**
  - USD 5.1 bn
  - +12%
  - Peak sales USD >7bn
  - US LoE 2029+

- **Entresto®**
  - USD 4.5 bn
  - +33%
  - Peak sales USD >5bn
  - US LoE 2025+

- **zolgensma®**
  - USD 1.5 bn
  - +26%
  - Peak sales multi-bn
  - US LoE 2031+

- **KISQALI®**
  - USD 1.2 bn
  - +43%
  - Peak sales multi-bn
  - US LoE 2031+

- **Kesimpta®**
  - USD 1.0 bn
  - +270%
  - Peak sales multi-bn
  - US LoE 2031+

- **LEQVIO®**
  - USD 0.1 bn
  - nm
  - Peak sales multi-bn
  - US LoE 2036+

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nm – not meaningful.  
LoE – Loss of exclusivity.  
All growth rates in constant currencies (cc). US LoEs are estimated based on relevant patents; further extensions possible.  
1. Including Zolgensma® IT.
Recently launched Pluvicto™ and Sceblix® add potential upsides

US launch beating internal expectations

- Manufacturing issues remediated
- Permanent A code granted in Jul, effective Oct
- More than 50% of insured lives covered (across Medicare, Medicaid and private payers)
- >100 target RLT sites operational
- Additional Ph3 studies in earlier settings on track (pre-taxane mCRPC and mHSPC)

continues strong US uptake

- $31m Q2 sales driven by patients with resistance/intolerance to other TKIs
- 44% 3L+ new patient share\(^1\)
- 16% NBRx share across CML lines of treatment\(^1\)
- 1L Ph3 study (1L) enrolling ahead of plan
- EC approval and rollout ongoing across ex-US markets

Industry-leading development engine; now prioritizing value per asset

Total NME approvals by company (1999-2021)\(^1\)

- **Prioritization**: Active prioritization for core Therapeutic Areas
- **Commercial focus**: Increased commercial input into R&D
- **Development/TPP**: US TPP prioritized, portfolio prioritization focusing on high-value assets
- **Operational efficiency**: Strengthen efficiency by simplifying structures; further integrating R&D to accelerate key early assets
- **People**: Maintain/strengthen high-performing organization of competent and engaged talent

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1. US FDA NME approvals
New Novartis: Our strategy

Our focus

Our priorities

Conclusion

Abbreviations

Key near-term readouts (2023 – 2024) for **high value assets**...

**Kisqali ●●●**
NATALEE trial in adjuvant breast cancer testing both high-risk and intermediate-risk patients with final Phase 3 readout expected in **2023**

**Iptacopan ●●●**
APPLY-PNH trial with expected Phase 3 readout in H2 2022, followed by other indications in **2023**

**Pluvicto ●●**
PSMAfore trial in mCRPC (post-ARDT, pre-taxane) with expected readout *end of 2022 / early 2023*
PSMAAddition trial in mHSPC with expected readout in **2024**

**Remibrutinib ●●**
CSU Phase 3 REMIX-1 and -2 trials with expected readout in **2024** and Multiple sclerosis Phase 3 REMODEL-1 and -2 trials with expected readout in **2025**

**Scemblix ●●**
1L CML-CP trial with expected readout in **2024**

Unprobabilized peak sales of indications in late-stage development: ● > USD 1bn ●● > USD 2bn ●●● > USD 3bn
...from a **catalyst rich pipeline** across our core **Therapeutic Areas**

Catalyst readouts significantly increase in 2024-2025 timeframe

### Key submission enabling readouts

<table>
<thead>
<tr>
<th>2022-2023</th>
<th>2024-2025</th>
<th>2026-2027</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solid Tumors</strong></td>
<td><strong>Solid Tumors</strong></td>
<td><strong>Secondary Prevention</strong></td>
</tr>
<tr>
<td>In scope: Selected top assets (&gt;1bn in development) with programs in phase 3 (or pivotal trial submission enabling)</td>
<td>1. Option deal, BeiGene study, PD-L1 High and Locally Advanced NSCLC</td>
<td></td>
</tr>
<tr>
<td>Pelacarsen CVRR</td>
<td>Cosentyx® GCA</td>
<td>Leqvio® Secondary Prevention</td>
</tr>
<tr>
<td>Ligilizumab Food allergy</td>
<td>Remibrutinib MS</td>
<td>Iخلاماب Secondary Prevention</td>
</tr>
<tr>
<td>Remibrutinib MS</td>
<td>Cosentyx® CSU</td>
<td>Inatalumab Sjögren’s</td>
</tr>
<tr>
<td>JDQ443 2/3L NSCLC</td>
<td>Zolgensma® SMA IT</td>
<td>Inatalumab Lupus nephritis</td>
</tr>
<tr>
<td>NIS793 Pancreatic cancer</td>
<td>Olacopinib® 1L PDL1hi and 1L LA NSCLC</td>
<td>Cosentyx® Lupus nephritis</td>
</tr>
<tr>
<td>Pluvicto® mHSPC Pre-taxane</td>
<td>Iptacopan aHUS</td>
<td>Iخلاmab Hematology indications</td>
</tr>
<tr>
<td>Iptacopan PNH</td>
<td>Sabatolimab MDS</td>
<td></td>
</tr>
</tbody>
</table>

**Cardiovascular**  
**Immunology**  
**Neuroscience**  
**Solid Tumors**  
**Hematology**
Potential positive NATALEE readout offers significant upside to sales growth

Kisqali® Ph3 OS results in 1L mBC

### MONALEESA-2
- Risk reduction: 24%
- Median OS: 63.9 months\(^1\)

### MONALEESA-7
- Risk reduction: 24%
- Median OS: 58.6 months\(^2\)

### MONALEESA-3
- Risk reduction: 33%
- Median OS: 67.6 months\(^3\)

- Proven OS benefit across all three Phase 3 clinical trials
- Same OS benefit regardless of menopausal status, hormone therapy partner, or dose modifications\(^4\)
- Maintains clinical benefit even after prior CDK4/6i use\(^5\)

NATALEE adjuvant study

- Fully enrolled as of April 2021
- Primary analysis planned at 500 iDFS events, expected in 2023
- Interim analyses at 70% and 85%

<table>
<thead>
<tr>
<th>Indication</th>
<th>Early breast cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential</td>
<td>• • •</td>
</tr>
<tr>
<td>Population</td>
<td>218K (US &amp; EU)(^6)</td>
</tr>
</tbody>
</table>

To date not reached first interim; expect filing in 2023

---

1. In months vs. vs 51.4, P value: 0.008. Reference: Hortobagyi, GN et al., 2022
2. vs 51.8. Reference: Lu, YS et al., 2022
3. vs 51.4. Reference: Neven, P et al., 2022
4. Based on an analysis of MONALEESA-2, -3 and -7
5. Based on the MAINTAIN IIT, Patients who received Kisqali and changed their ET in 2L had PFS twice as long as patients who only changed their ET
6. eBC Patient - Adjuvant Breast Cancer Opportunity Assessment June 2020
Strengthening integration within R&D to accelerate key early programs

### Selected assets with integrated plans

<table>
<thead>
<tr>
<th>Asset Description</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBL949 (Obesity related diseases)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIN816 (S-AKI) ATP Modulator 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XXB750 (Cardiovascular diseases)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ianalumab (LN) BAFF-R inhibitor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAS825 (Hidradenitis Suppurativa)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BLZ945 (Amyotrophic lateral sclerosis) CSF-1R inhibitor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JDQ443 (NSCLC) KRAS inhibitor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>177Lu NeoB (Solid Tumors) Radioligand therapy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGY825 (NSCLC)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Bars in Gantt chart indicate current phase of development. 1. Phase 2 initiating.
**Organizational changes announced in April on track to deliver operational excellence and drive growth...**

- **Integrated IM business, with US and International at ECN**
- **New Strategy & Growth function**
- **Single Operations unit and integrated global G&A functions**

**Short-term**
- Accelerate growth
  - Strong pipeline management, business development
  - Accelerate technology transformation, create novel digital solutions, increase productivity
  - More agile M&S resource allocation to top brands

**Mid- to long-term**
- Innovation and sales growth
  - Above peer median sales growth
  - Bringing Novartis into top 5 in the US
  - Productivity and focus for R&D and business development
  - Simpler, faster, more flexible decision making
...and on track to deliver operational efficiencies

Reorganization on track

- Organizational changes
- ~USD 1.5bn in savings
- People perspective

Savings of ~USD 1.5bn to be fully embedded by 2024

- Integrated Operations unit synergies
- Simplification of M&S structure (non-customer-facing)
- Streamlining G&A functions

2022

Mineral impact, offsetting energy costs and inflation pressure in supply chain

2023

2024

~USD 1.5bn

~USD 1.5bn
Refreshing our leadership team

Executive Committee of Novartis

Vas Narasimhan
Chief Executive Officer

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

Richard Saynor
Chief Executive Officer, Sandoz

Klaus Moosmayer
Chief Ethics, Risk & Compliance Officer

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

Steffen Lang*
President, Operations

Rob Kowalski
Chief People & Organization Officer

Shreeram Aradhya*
President, Global Drug Development & Chief Medical Officer

Ronny Gal*
Chief Strategy & Growth Officer

Victor Bulto*
President, Innovative Medicines US

Karen Hale
Chief Legal Officer

Harry Kirsch
Chief Financial Officer

* Recent role or appointment change
### Continue to strengthen foundations including improving access for patients

#### Broad access to innovation

<table>
<thead>
<tr>
<th>Material ESG factors</th>
<th>Access</th>
<th>Innovation</th>
<th>Other priority areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Patient health &amp; safety</td>
<td>100% of launches with access strategy (Access Principles)</td>
<td>Innovative therapies reaching more LMIC patients faster</td>
<td>Human capital: Diversity targets</td>
</tr>
<tr>
<td>2. Access</td>
<td>Innovative pricing and access models (SSA and EMB)</td>
<td>Neglected tropical diseases</td>
<td>Environment: Net zero by 2040</td>
</tr>
<tr>
<td>3. Innovation</td>
<td>Sustainability-linked bond targets on track (LMICs, 2025):</td>
<td>Clinical trial diversity</td>
<td>Ethics: High ethical standards and zero tolerance</td>
</tr>
<tr>
<td>4. Ethical business practices</td>
<td>- 3x patient reach(^1) with strategic innovative therapies</td>
<td></td>
<td>Leading position in third-party ESG ratings</td>
</tr>
<tr>
<td></td>
<td>- 1.5x patient reach(^1) through flagship programs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Results in improved population health and substantial social impact
Conclusion
Novartis is a focused company playing in an attractive market, with a differentiated portfolio and strong global footprint

<table>
<thead>
<tr>
<th>Attractive market &amp; financials</th>
<th>Differentiated portfolio</th>
<th>Strong global footprint</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;$1 tn IM market</td>
<td>5 core TAs</td>
<td>~280 m patients(^1) reached in 140 countries</td>
</tr>
<tr>
<td>Cardiovascular, Immunology, Neuroscience, Solid Tumors and Hematology – attractive TAs</td>
<td>Emerging leadership with clear disease area priorities</td>
<td>Building US to a top 5 player and reinforcing international leadership</td>
</tr>
<tr>
<td>+4% sales growth (2021 – 2027, % cc, CAGR)</td>
<td>Strong mid/late-stage pipeline</td>
<td>Leading R&amp;D organization</td>
</tr>
<tr>
<td>~40%+ core margin (2027+)</td>
<td>Focused on high value innovation</td>
<td>Industry leading development engine</td>
</tr>
<tr>
<td>Shareholder focused capital allocation</td>
<td>3 next-generation platforms</td>
<td>$9 bn in R&amp;D spend(^2)</td>
</tr>
<tr>
<td></td>
<td>Leadership across technology platforms</td>
<td>&gt;30 manufacturing sites</td>
</tr>
<tr>
<td></td>
<td>Expanding % IM sales from biologics and technology platforms</td>
<td>Incl. leading capabilities in Cell, Gene, and Radioligand Therapies</td>
</tr>
</tbody>
</table>

1. Including IM + Global Health 2021  2. Core R&D actuals 2021
Novartis concluded that separation of Sandoz, via 100% spin-off, is in the best interests of shareholders (completion H2 2023)

Expected benefits

**NOVARTIS** (New-Novartis)

- Clear investment thesis as an Innovative Medicines business
  - Exclusive focus and investment in Innovative Medicines
  - Strong position in 5 core TAs, leadership in technology platforms
  - Enhanced execution of the pipeline and commercialization
  - Improved financial profile and return on capital
  - Organizational and operational simplification
  - Capital allocation based on its business needs

**SANDOZ** (Standalone)

- Clear investment thesis as a Generics and Biosimilars business
  - #1 European Generics company¹ and a global leader in Biosimilars
  - More effective business strategy for the Gx market
  - Greater freedom to operate
  - Capital allocation based on its business needs
  - Culture fit for the Gx industry, with focus on faster/leaner decision-making and more efficient use of cost base
  - Improving access with broad patient reach of ~500m patients

Limited synergies between Innovative Medicines and Generics; at opposite ends of the biopharma value chain with significant differences in business dynamics

1. Based on IQVIA MAT 03/2022, gross sales for combined Generics and Biosimilars market.
Sandoz is uniquely positioned with a strong and balanced presence in both Generics and Biosimilars

Gross sales in global Biosimilars and Generics\(^1\)
%

<table>
<thead>
<tr>
<th>Healthcare peers with Biosimilars sales</th>
<th>Generics peers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandoz</td>
<td>&lt;30%</td>
</tr>
<tr>
<td>A</td>
<td>&lt;30%</td>
</tr>
<tr>
<td>B</td>
<td>&lt;30%</td>
</tr>
<tr>
<td>C</td>
<td>&lt;30%</td>
</tr>
<tr>
<td>D</td>
<td>&lt;30%</td>
</tr>
<tr>
<td>E</td>
<td>&lt;30%</td>
</tr>
<tr>
<td>F</td>
<td>&lt;30%</td>
</tr>
<tr>
<td>G</td>
<td>&lt;30%</td>
</tr>
<tr>
<td>H</td>
<td>&lt;30%</td>
</tr>
</tbody>
</table>

Substantial synergies between Gx and Biosimilars: commercial execution, channels, people and culture

European “pure-play” Generics and Biosimilar market leader

H1 sales – total USD 4.7bn (+6\%)\(^1\)
%

Accelerating leadership in Europe

Double-digit growth RoW

Stabilizing in US

<table>
<thead>
<tr>
<th>Region</th>
<th>Sales (USD bn)</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>2.5bn (+7%)</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>0.9bn (-2%)</td>
<td></td>
</tr>
<tr>
<td>ROW</td>
<td>1.3bn (+11%)</td>
<td></td>
</tr>
</tbody>
</table>

1. Reported H1’22 Earnings
Key takeaways

1. Transforming to a pure-play IM company

2. Focusing strategy on 5 core TAs, technology platforms and the US

3. Establishing 8 in-market brands with multi-bn $ potential

4. Prioritizing pipeline to high-value NMEs in our 5 core TAs

5. Continuing to deliver improved financials

6. Continuing with shareholder friendly capital allocation

7. Strengthening foundations – ESG and culture
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
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<tbody>
<tr>
<td>1L</td>
<td>First-line</td>
</tr>
<tr>
<td>2/3L</td>
<td>Second or third line</td>
</tr>
<tr>
<td>adj.BC</td>
<td>Adjuvant breast cancer</td>
</tr>
<tr>
<td>aHUS</td>
<td>Atypical Hemolytic Uremic Syndrome</td>
</tr>
<tr>
<td>ALS</td>
<td>Amyotrophic lateral sclerosis</td>
</tr>
<tr>
<td>AML</td>
<td>Acute myeloid leukemia</td>
</tr>
<tr>
<td>AMR</td>
<td>Antimicrobial resistance</td>
</tr>
<tr>
<td>axSPA</td>
<td>Axial spondyloarthritis</td>
</tr>
<tr>
<td>BAFF</td>
<td>B-cell activating factor</td>
</tr>
<tr>
<td>BCR</td>
<td>Biochemical recurrence</td>
</tr>
<tr>
<td>BTK</td>
<td>Bruton tyrosine kinase</td>
</tr>
<tr>
<td>C3G</td>
<td>C3 glomerulopathy</td>
</tr>
<tr>
<td>CML</td>
<td>Chronic myeloid leukemia</td>
</tr>
<tr>
<td>CVRR</td>
<td>Cardio-vascular risk reduction</td>
</tr>
<tr>
<td>CVRR-LDLC</td>
<td>Secondary prevention of cardiovascular events in patients with elevated levels of LDLC</td>
</tr>
<tr>
<td>CVRR-Lp(a)</td>
<td>Secondary prevention of cardiovascular events in patients with elevated levels of lipoprotein (a)</td>
</tr>
<tr>
<td>ECN</td>
<td>Executive committee of Novartis</td>
</tr>
<tr>
<td>EMB</td>
<td>Emerging Market Brands</td>
</tr>
<tr>
<td>ES-SCLC</td>
<td>Extensive stage small cell lung cancer</td>
</tr>
<tr>
<td>FA</td>
<td>Food allergy</td>
</tr>
<tr>
<td>GBM</td>
<td>Glioblastoma</td>
</tr>
<tr>
<td>GCA</td>
<td>Giant cell arteritis</td>
</tr>
<tr>
<td>GEA</td>
<td>Gastroesophageal adenocarcinoma</td>
</tr>
<tr>
<td>GEP-NET</td>
<td>Gastroenteropancreatic neuroendocrine tumor</td>
</tr>
<tr>
<td>GIST</td>
<td>Gastrointestinal stromal tumor</td>
</tr>
<tr>
<td>GRPR</td>
<td>Gastrin-releasing peptide receptor</td>
</tr>
<tr>
<td>Gx</td>
<td>Generics</td>
</tr>
<tr>
<td>HA</td>
<td>Health authorities</td>
</tr>
<tr>
<td>iDFS</td>
<td>Invasive Disease-Free Survival</td>
</tr>
<tr>
<td>IgAN</td>
<td>IgA nephropathy</td>
</tr>
<tr>
<td>IM</td>
<td>Innovative Medicines</td>
</tr>
<tr>
<td>LDLC</td>
<td>Low-density lipoprotein cholesterol</td>
</tr>
<tr>
<td>LMICs</td>
<td>Low / middle income countries</td>
</tr>
<tr>
<td>LN</td>
<td>Lupus nephritis</td>
</tr>
<tr>
<td>LP</td>
<td>Lichen Planus</td>
</tr>
<tr>
<td>Lp(a)</td>
<td>Lipoprotein(a)</td>
</tr>
<tr>
<td>mBC</td>
<td>Metastatic breast cancer</td>
</tr>
<tr>
<td>mCRPC</td>
<td>Metastatic castration-resistant prostate cancer</td>
</tr>
<tr>
<td>MDS</td>
<td>Myelodysplastic syndrome</td>
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<tr>
<td>MDT</td>
<td>Multi Disciplinary Team</td>
</tr>
<tr>
<td>mHSPC</td>
<td>Metastatic hormone-sensitive prostate cancer</td>
</tr>
<tr>
<td>MS</td>
<td>Multiple sclerosis</td>
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<tr>
<td>NME</td>
<td>New molecular entity</td>
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<tr>
<td>NSCLC</td>
<td>Non-small cell lung cancer</td>
</tr>
<tr>
<td>OA</td>
<td>Osteoarthritis</td>
</tr>
<tr>
<td>PCa</td>
<td>Prostate cancer</td>
</tr>
<tr>
<td>PDAC</td>
<td>Pancreatic ductal adenocarcinoma</td>
</tr>
<tr>
<td>PDL-1</td>
<td>Programmed death-ligand 1</td>
</tr>
<tr>
<td>PNH</td>
<td>Paroxysmal nocturnal haemoglobinuria</td>
</tr>
<tr>
<td>PPGL</td>
<td>Pheochromocytoma and paragangliomas</td>
</tr>
<tr>
<td>PsA IV</td>
<td>Psoriatic arthritis Intravenous</td>
</tr>
<tr>
<td>PSMA</td>
<td>Prostate-specific membrane antigen</td>
</tr>
<tr>
<td>RLI</td>
<td>Radioligand imaging</td>
</tr>
<tr>
<td>RLT</td>
<td>Radioligand therapy</td>
</tr>
<tr>
<td>SjS</td>
<td>Sjögren's syndrome</td>
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<tr>
<td>SMA-IT</td>
<td>Spinal muscular atrophy-intrathecal</td>
</tr>
<tr>
<td>SSA</td>
<td>Sub-Saharan Africa Strategy</td>
</tr>
<tr>
<td>TA</td>
<td>Therapeutic area</td>
</tr>
<tr>
<td>TKI</td>
<td>Tyrosine kinase inhibitor</td>
</tr>
<tr>
<td>TPD</td>
<td>Targeted protein degradation</td>
</tr>
<tr>
<td>TPP</td>
<td>Target product profile</td>
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