This communication contains certain forward-looking statements concerning the MorphoSys group of companies, including the expectations regarding Monjuvi’s ability to treat patients with relapsed or refractory diffuse large B-cell lymphoma ("DLBCL"), the further clinical development of tafasitamab, including ongoing confirmatory trials, additional interactions with regulatory authorities and expectations regarding future regulatory filings and possible additional approvals for tafasitamab as well as the commercial performance of Monjuvi. The words "anticipate", "believe", "estimate", "expect", "intend", "may", "plan", "predict", "project", "would", "could", "potential", "possible", "hope" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. The forward-looking statements contained herein represent the judgment of MorphoSys as of the date of this release and involve known and unknown risks and uncertainties, which might cause the actual results, financial condition and liquidity, performance or achievements of MorphoSys, or industry results, to be materially different from any historic or future results, financial conditions and liquidity, performance or achievements expressed or implied by such forward-looking statements. In addition, even if MorphoSys’ results, performance, financial condition and liquidity, and the development of the industry in which it operates are consistent with such forward-looking statements, they may not be predictive of results or developments in future periods. Among the factors that may result in differences are MorphoSys’ expectations regarding risks and uncertainties related to the impact of the COVID-19 pandemic to MorphoSys’ business, operations, strategy, goals and anticipated milestones, including its ongoing and planned research activities, ability to conduct ongoing and planned clinical trials, clinical supply of current or future drug candidates, commercial supply of current or future approved products, and launching, marketing and selling current or future approved products, the global collaboration and license agreement for tafasitamab, the further clinical development of tafasitamab, including ongoing confirmatory trials, and MorphoSys’ ability to obtain and maintain requisite regulatory approvals and to enroll patients in its planned clinical trials, additional interactions with regulatory authorities and expectations regarding future regulatory filings and possible additional approvals for tafasitamab as well as the commercial performance of Monjuvi, MorphoSys’ reliance on collaborations with third parties, estimating the commercial potential of its development programs and other risks indicated in the risk factors included in MorphoSys’ Annual Report on Form 20-F and other filings with the U.S. Securities and Exchange Commission. Given these uncertainties, the reader is advised not to place any undue reliance on such forward-looking statements. These forward-looking statements speak only as of the date of publication of this document. MorphoSys expressly disclaims any obligation to update any such forward-looking statements in this document to reflect any change in its expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements, unless specifically required by law or regulation.

The compounds discussed in this slide presentation are investigational products being developed by MorphoSys and its partners and are not currently approved by the U.S. Food and Drug Administration (FDA), European Medicines Agency (EMA) or any other regulatory authority (except for tafasitamab/Monjuvi® and tafasitamab/Minjuvi® in relapsed or refractory DLBCL). The safety and efficacy of these investigational products have not been established and there is no guarantee any investigational product will be approved by regulatory authorities.

Monjuvi® and Minjuvi® are registered trademarks of MorphoSys AG.
Strategic Oncology Focus with Strong Financial Position

OUR AMBITION
Redefine How Cancer is Treated

PELABRESIB
Become new standard of care in myelofibrosis as combination therapy; expand into other myeloid diseases

Monjuvi®
Sustain second-line DLBCL usage; generate growth in new indications

Tulnimetostat
Cost-effective investigations in solid tumors and lymphomas; pursue partnership opportunities

CASH AVAILABLE TO MID-2026*, COVERING ALL NEAR-TERM CATALYSTS

*Excluding convertible debt repayment (interest and principal)
Monjuvi® (tafasitamab-cxix) is approved under accelerated approval by the U.S. FDA in combination with lenalidomide for the treatment of adult patients with relapsed or refractory DLBCL not otherwise specified, including DLBCL arising from low grade lymphoma, and who are not eligible for autologous stem cell transplant (ASCT); DLBCL, diffuse large B-cell lymphoma; Monjuvi in the first-line DLBCL setting, pelabresib, and tulnimetostat are investigational uses or products and have not yet been evaluated or approved; The development of pelabresib was funded in part by The Leukemia and Lymphoma Society®.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>1</td>
<td>File and prepare for launch of pelabresib in first-line myelofibrosis</td>
</tr>
<tr>
<td>2</td>
<td>Prioritize and advance key clinical development programs</td>
</tr>
<tr>
<td>3</td>
<td>Diligently manage cash runway and implement cost-optimization measures</td>
</tr>
</tbody>
</table>
01

File and Prepare for Launch of Pelabresib in First-Line Myelofibrosis
Pelabresib's Potential in First-Line Myelofibrosis, Positioned for Success

**IMPRESSIVE CLINICAL BENEFITS**
- Phase 3 results show benefits across all four disease hallmarks and well-tolerated safety profile
- Phase 2 results show deep/durable responses at 48 and 60 weeks

**OPERATIONAL EXCELLENCE**
- Track record of delivering key milestones ahead of schedule
- Established and experienced Commercialization team, with Sales and Medical Affairs

**STRONG SUPPORT FROM PHYSICIAN COMMUNITY**
- Significant spleen size reduction is key finding given association with patient survival
- Results point to potential paradigm shift in myelofibrosis treatment

**MULTI-BILLION DOLLAR MARKET OPPORTUNITY**
- Dire need for treatment that addresses four disease hallmarks
- Worldwide opportunity with blockbuster potential

No Approved Myelofibrosis Treatments Address All Four Hallmarks of Disease; New Therapies are Critically Needed

**THE FOUR HALLMARKS**

1. Enlarged Spleen
2. Anemia
3. Bone Marrow Fibrosis
4. Disease-Associated Symptoms

**EPIDEMIOLOGY**

- ~18,000 patients in the U.S., with 3,200 diagnosed annually
- ~18,000 patients in Europe, with 3,400 diagnosed annually
- ~90% of patients have intermediate- or high-risk disease at diagnosis, with vast majority in intermediate-risk category

**MEDIAN OVERALL SURVIVAL***

- Intermediate-risk**: ~4 – 14.2 years
- High-risk: ~1.5 years

---

*Measured by Dynamic International Prognostic Scoring System (DIPSS)  |  **Int-1 and Int-2
Pelabresib and Ruxolitinib Combination Offers Potential to Shift Myelofibrosis Treatment Paradigm

All myelofibrosis disease hallmarks were improved in Phase 3 MANIFEST-2 study

- Significantly reduced spleen size, nearly doubling SVR35 response rate
- Showed a strong positive trend in reducing symptom burden
- Improved measures of anemia
- Improved bone marrow fibrosis; biomarker reductions suggest disease modification

Safety results consistent with prior clinical trials, with fewer grade ≥3 adverse events compared with placebo plus ruxolitinib

SVR35, ≥35% reduction in spleen volume
Pelabresib and Ruxolitinib Combination Significantly Reduced Spleen Size

Key finding given the known association between spleen volume reduction and patient survival

ITT, intent-to-treat; SVR35, ≥35% reduction in spleen volume.

Spleen volume assessed by central read.

*Waterfall plots represent patients who have baseline and Week 24 data.


<table>
<thead>
<tr>
<th>ITT POPULATION</th>
<th>Pelabresib + Ruxolitinib (N=214)</th>
<th>Placebo + Ruxolitinib (N=216)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVR35 at Week 24</td>
<td>65.9%</td>
<td>35.2%</td>
</tr>
<tr>
<td>p-value</td>
<td>&lt;0.001</td>
<td></td>
</tr>
</tbody>
</table>

ITT, intent-to-treat; SVR35, ≥35% reduction in spleen volume. Spleen volume assessed by central read.


Pelabresib and Ruxolitinib Combination Showed Strong Positive Trend in Reducing Symptom Burden

Disease-associated symptom benefits were observed and balanced across all TSS domains.

Mean absolute change in TSS from baseline

Pelabresib + Ruxolitinib (n=175*)  Placebo + Ruxolitinib (n=182*)

<table>
<thead>
<tr>
<th>ITT POPULATION</th>
<th>Pelabresib + Ruxolitinib (N=214)</th>
<th>Placebo + Ruxolitinib (N=216)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSS change† from baseline at Week 24</td>
<td>-15.99 (Mean Baseline: 28.26)</td>
<td>-14.05 (Mean Baseline: 27.36)</td>
</tr>
<tr>
<td>p-value</td>
<td>0.0545</td>
<td></td>
</tr>
</tbody>
</table>

ANCOVA, analysis of covariance; ITT, intent-to-treat; TSS, total symptom score.
*Waterfall plots represent patients who have baseline and Week 24 data.
†Change from baseline determined by ANCOVA model using Multiple Imputation.
Pelabresib and Ruxolitinib Combination Improved Multiple Measures of Anemia

More patients achieved hemoglobin response and fewer patients required transfusions versus placebo plus ruxolitinib

ITT, intent-to-treat; RBC, red blood cell; DIPSS, Dynamic International Prognostic Scoring System

*Hemoglobin response is defined as a ≥1.5 g/dL mean increase in hemoglobin from baseline in the absence of transfusions during the previous 12 weeks. Baseline hemoglobin defined as the last assessment prior to or on Cycle 1 Day 1, regardless of blood transfusions. A similar effect was observed across DIPSS categories.


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Grade ≥3 Adverse Events Were Less Frequent with Pelabresib and Ruxolitinib Combination

**TEAES OF ALL GRADES THAT OCCURRED IN ≥10% OF PATIENTS**

<table>
<thead>
<tr>
<th>Hematologic events</th>
<th>Anemia</th>
<th>Thrombocytopenia</th>
<th>Platelet count decreased†</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>43.9%</td>
<td>32.1%</td>
<td>23.1%</td>
</tr>
</tbody>
</table>

| Non-hematologic events | Diarrhea | Dysgeusia | Constipation | Nausea | Cough | Asthenia | Fatigue | Dizziness | Headache | COVID-19 | Dyspnea |
|------------------------|----------|-----------|--------------|--------|-------|----------|---------|-----------|----------|----------|
|                        | 23.1%    | 18.4%     | 18.4%        | 14.2%  | 12.7% | 11.8%    | 11.8%   | 11.3%     | 11.3%    | 9%       |

**SAFETY POPULATION**

<table>
<thead>
<tr>
<th>Pelabresib + ruxolitinib (N=212)</th>
<th>Placebo + ruxolitinib (N=214)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Grade ≥3</td>
<td>% Grade ≥3</td>
</tr>
</tbody>
</table>

COVID-19, coronavirus disease 2019; TEAE, treatment-emergent adverse event.
*Safety population: received at least one dose of study drug. †Platelet count decreased was classified under the system organ class of investigation. TEAEs are regardless of relationship to study drug. A TEAE for the double-blinded treatment period is defined as an adverse event that has a start date on or after the first dose of the pelabresib/placebo or before the start of alternative (off-study) treatment for myelofibrosis (MF), whichever occurs first. Rampal, R, et.al. ASH 2023. Oral 628. | Preliminary Analyses from Data Cut-Off August 31, 2023

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Planned Roadmap to Approval of Pelabresib in First-Line Myelofibrosis

**DECEMBER 2023**
MANIFEST-2 Primary Analysis

**MID-2024**
File for Approval in U.S. and Europe

**MID-2025**
U.S. Approval

- **Q3 2023**
  - DECEMBER 2023
  - MANIFEST-2
  - Primary Analysis

- **Q4 2023**
  - MANIFEST-2
  - Primary Analysis

- **Q1 2024**
  - MID-2024
  - File for Approval in U.S. and Europe

- **Q2 2024**
  - MID-2024
  - File for Approval in U.S. and Europe

- **Q3 2024**
  - Q3 2024
  - U.S. Filing Acceptance

- **Q4 2024**
  - MID-2024
  - File for Approval in U.S. and Europe

- **Q1 2025**
  - MID-2025
  - U.S. Approval

- **Q2 2025**
  - MID-2025
  - U.S. Approval

- **Q3 2025**
  - MID-2025
  - U.S. Approval

- **Q4 2025**
  - MID-2025
  - U.S. Approval
Prioritize and Advance Key Clinical Development Programs
Deliver Near-Term Phase 3 Growth Opportunities, Implement Cost-Effective Mid-Stage Program Strategies

<table>
<thead>
<tr>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>PHASE 1/2</th>
</tr>
</thead>
</table>
| **PELABRESIB**  
LR MDS & ET  

- Robust proof-of-concept results show potential clinical benefit in myeloid diseases  
- Focus remains on first-line myelofibrosis |
| **TAFASITAMAB**  
Front-Line DLBCL  

- Fully enrolled, 899 patients randomized  
- Topline readout in 2H 2025  

**TAFASITAMAB**  
R/R FL/MZL  

- Fully enrolled, 654 patients randomized  
- Topline readout in 2H 2024 |
| **TULMIMETOSTAT**  
Solid Tumors & Lymphomas  

- EZH2 has a broad role in tumor biology  
- Phase 2 data show deep and durable responses  
- Pursue partnership opportunities to expedite development |

LR MDS, lower-risk myelodysplastic syndromes; ET, essential thrombocytemia; DLBCL, diffuse large B-cell lymphoma; R/R, relapsed/refractory; FL, follicular lymphoma; MZL, marginal zone lymphoma; EZH2, enhancer of zeste homolog 2  
### Incidence

30,000 newly diagnosed DLBCL patients in U.S. annually

### Medical Need

50% of high-risk DLBCL patients (IPI 3-5) are not cured with R-CHOP

---

**Phase 3 FRONTMIND Study**

**Study Population**

Previously untreated high-intermediate and high-risk (IPI 3-5) DLBCL and HGBCL patients

**Patients Randomized**

899

**Treatment Arm/CoHort**

Tafasitamab + Lenalidomide + R-CHOP vs. Placebo + R-CHOP

**Endpoints**

Primary: PFS

Key Secondary: EFS, OS

---

DLBCL, diffuse large B-cell lymphoma; HGBCL, High-grade B-cell lymphoma; R-CHOP, rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisone; IPI, International Prognostic Index; PFS, progression-free survival; EFS, event-free survival; OS, overall survival

Further Opportunity to Broaden Tafasitamab Use in Additional Indolent Lymphoma Indications

**INCIDENCE**

14,200 newly diagnosed FL patients in U.S. annually

**MEDICAL NEED**

80% of FL patients relapse on first-line therapies*

---

**PHASE 3 inMIND STUDY**

**STUDY POPULATION**

- r/r FL
- Grade 1 to 3a
- r/r MZL

**PATIENTS RANDOMIZED**

654

**TREATMENT ARM/COHORT**

- Tafasitamab + Lenalidomide + Rituximab
- Placebo + Lenalidomide + Rituximab

**ENDPOINTS**

- **Primary:** PFS in FL
- **Key Secondary:** PFS in FL and MZL, PET-CR rate in FL, OS in FL

---

**INCIDENCE**

- 14,200 newly diagnosed FL patients in U.S. annually

**MEDICAL NEED**

- 80% of FL patients relapse on first-line therapies*

---

*Patients who receive drug therapy in the first-line setting and whose disease has not transformed into DLBCL
R/R, relapsed/refractory; FL, follicular lymphoma; MZL, marginal zone lymphoma; PFS, progression-free survival; PET, positron emission tomography; CR, complete response; OS, overall survival
Tulmimetostat Offers Potential First- and Best-in-Class Opportunities Across Several Oncology Indications

EZH2 has broad role in tumor biology, offering monotherapy and combination therapy development options

TULMIMETOSTAT VS. 1ST GEN EZH2/1I

- Increased potency
- Longer residence time
- No evidence of reduced exposure due to induced metabolism
- Enhanced physico-chemical properties

Data Cut-Off February 14, 2023

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EZH2, enhancer of zeste homolog 2; GEN, generation; I, inhibitor; PTCL, peripheral T-cell lymphoma; DLBCL, diffuse large B-cell lymphoma

## Mid-to-Late-Stage Partner Programs Progressing Well, Offering Potential Upside and Options for Non-Dilutive Financing

<table>
<thead>
<tr>
<th>PARTNER</th>
<th>DISEASE AREA</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IANALUMAB</td>
<td><strong>Novartis</strong>&lt;br&gt;Sjögren's Syndrome&lt;br&gt;Lupus Nephritis&lt;br&gt;Other autoimmune diseases</td>
<td>Several ongoing Phase 3 studies</td>
</tr>
<tr>
<td>ABELACIMAB</td>
<td><strong>Anthos Therapeutics</strong>&lt;br&gt;Venous Thromboembolism Prevention</td>
<td>Three ongoing Phase 3 studies</td>
</tr>
<tr>
<td>SETRUSUMAB</td>
<td><strong>Ultragenyx and Mereo BioPharma</strong>&lt;br&gt;Osteogenesis Imperfecta</td>
<td>Pivotal ongoing Phase 2/3 study</td>
</tr>
<tr>
<td>BIMAGRUMAB</td>
<td><strong>Lilly</strong>&lt;br&gt;Adult Obesity</td>
<td>Ongoing Phase 2b study</td>
</tr>
<tr>
<td>FELZARTAMAB</td>
<td><strong>HI-Bio and I-Mab Biopharma</strong>&lt;br&gt;Autoimmune Indications (PMN, IgAN)&lt;br&gt;Multiple Myeloma</td>
<td>Ongoing clinical development</td>
</tr>
</tbody>
</table>

PMN: primary membranous nephropathy; IgAN: immunoglobulin A nephropathy
03

Diligently Manage Cash Runway and Implement Cost-Optimization Measures
Strategic Allocation of Financial Resources will Support all Near-Term Catalysts

*Excluding debt and interest payments

**Excluding convertible debt repayment (interest and principal)

IMPLEMENT COST-OPTIMIZATION MEASURES

REDUCE 2024 CASH BURN TO ~€250 MILLION*

CASH RUNWAY EXTENDS TO MID-2026**
MorphoSys is Well Positioned to Create Significant Value

- Multi-Billion Dollar Market Opportunity with Pelabresib
- Regulatory and Late-Stage Development Catalysts Through 2025
- Strong Financial Position with Cash Available to Mid-2026*

*Excluding convertible debt repayment (interest and principal)
Thank you!

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