Genmab

Rooted in Science, Inspired by Patients

Investor Presentation

May 2024

Forward looking statement

This presentation contains forward looking statements. The words “believe”, “expect”, “anticipate”, “intend” and “plan” and similar expressions identify forward looking statements. All statements other than statements of historical facts included in this presentation, including, without limitation, those regarding our financial position, business strategy, plans and objectives of management for future operations (including development plans and objectives relating to our products), are forward looking statements. Such forward looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward looking statements. Such forward looking statements are based on numerous assumptions regarding our present and future business strategies and the environment in which we will operate in the future. The important factors that could cause our actual results, performance or achievements to differ materially from those in the forward looking statements include, among others, risks associated with product discovery and development, uncertainties related to the outcome of clinical trials, slower than expected rates of patient recruitment, unforeseen safety issues resulting from the administration of our products in patients, uncertainties related to product manufacturing, the lack of market acceptance of our products, our inability to manage growth, the competitive environment in relation to our business area and markets, our inability to attract and retain suitably qualified personnel, the unenforceability or lack of protection of our patents and proprietary rights, our relationships with affiliated entities, changes and developments in technology which may render our products obsolete, and other factors. Further, certain forward looking statements are based upon assumptions of future events which may not prove to be accurate. The forward looking statements in this document speak only as at the date of this presentation. Genmab does not undertake any obligation to update or revise forward looking statements in this presentation nor to confirm such statements to reflect subsequent events or circumstances after the date made or in relation to actual results, unless required by law.

Towards 2030:
Evolving Into a Fully Integrated Biotech Innovation Powerhouse

KYSO®

KNOCK YOUR SOCKS OFF

Core Purpose

Our unstoppable team will improve the lives of patients through innovative and differentiated antibody therapeutics.

Our Strategy

- ✓ Focus on core competence
- ✓ Turn science into medicine
- ✓ Build a profitable & successful biotech

Vision

By 2030, our KYSO® antibody medicines are fundamentally transforming the lives of people with cancer and other serious diseases.

Genmab

Solid Track Record and Financial Foundation Fuel Our Growth

- ✓ Over 40 cumulative INDs since 1999
- ✓ Innovative clinical pipeline: 10 Genmab owned ≥50%
- ✓ 8 approved medicines based on Genmab's innovation and antibody expertise
- ✓ Two approved medicines: Tivdak® (tisotumab vedotin-tftv) and EPKINLY®/TEPKINLY® (epcoritamab)
- ✓ Growing recurring revenue
- ✓ Sustainably profitable with cash position of ~USD 4.2B
- ✓ Investing in our capabilities
- ✓ Experienced, international leadership team

Genmab

Tivdak is being co-developed and co-promoted by Genmab and Pfizer. EPKINLY is being co-developed and co-promoted by Genmab and AbbVie

The Genmab Model

Deep insight into antibody biology & disease targets

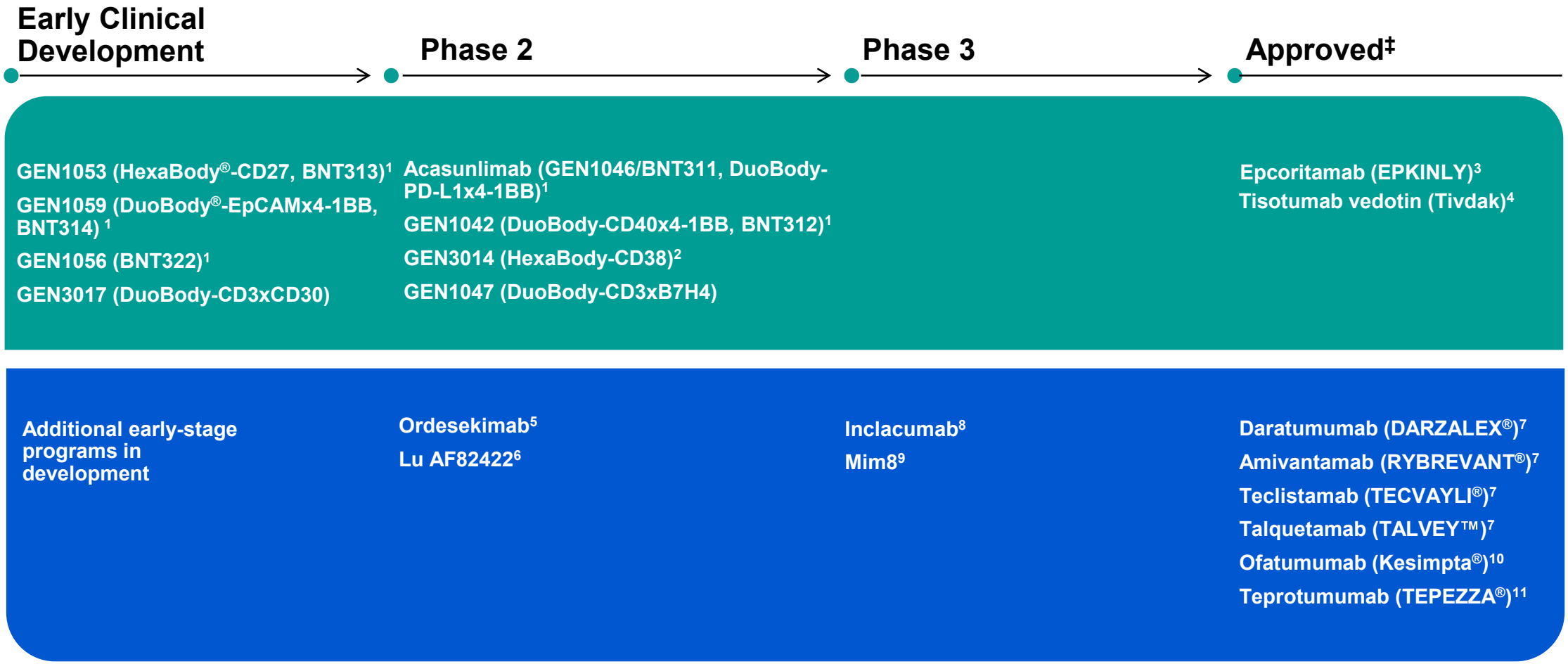
Proprietary technologies enable us to build a world-class pipeline

Match in-house expertise with strategic collaborations & partnerships

Strong pipeline of potential 1st-in-class / best-in-class products

Genmab

Innovative Clinical Pipeline: Genmab Proprietary* and Partnered Products - Most Advanced Development Phase



*Products where Genmab has ownership of at least 50%
‡See local prescribing information for full indications / safety information
[1]Co-development with BioNTech; [2]Genmab is developing HexaBody-CD38 in an exclusive worldwide license and option agreement with Janssen; [3]Co-development with AbbVie; [4]Co-development with; Seagen (Pfizer) [5]Development by Sanofi; [6]Development by Lundbeck; [7]Development and/or discovery by Janssen; [8]Development by Pfizer (Global Blood Therapeutics); [9]Development by Novo Nordisk; [10]Development by Novartis; [11]Development by Amgen

Power of Discovery and Drug Development Engine

>40 Cumulative INDs

Over 20 in Current Clinical Development or Approved

8 Approved
2 Phase 3
6 Phase 2
1 Phase 1/2
4 Phase 1

8 Product Approvals

	Entered Clinical Development	Entered Phase 3 / Registrational	Approved
Approved Products	8	8	8
In Current Clinical Development	10	2	

2024 Revenue Guidance: $2.8bn -$3.0bn

End-Market: $17.5bn*

DARZALEX (daratumumab) · Kesimpta (ofatumumab) · TEPEZZA (teprotumumab-trbw)
RYBREVANT (amivantamab-vmjw) · TECVAYLI · TALVEY (talquetamab-tgvs)
tivdak (tisotumab vedotin-tftv) · epkinly (epcoritamab-bysp)

Genmab Proprietary Pipeline

From 2 in development in 2017 to 2 approved and 10 in development by 2024

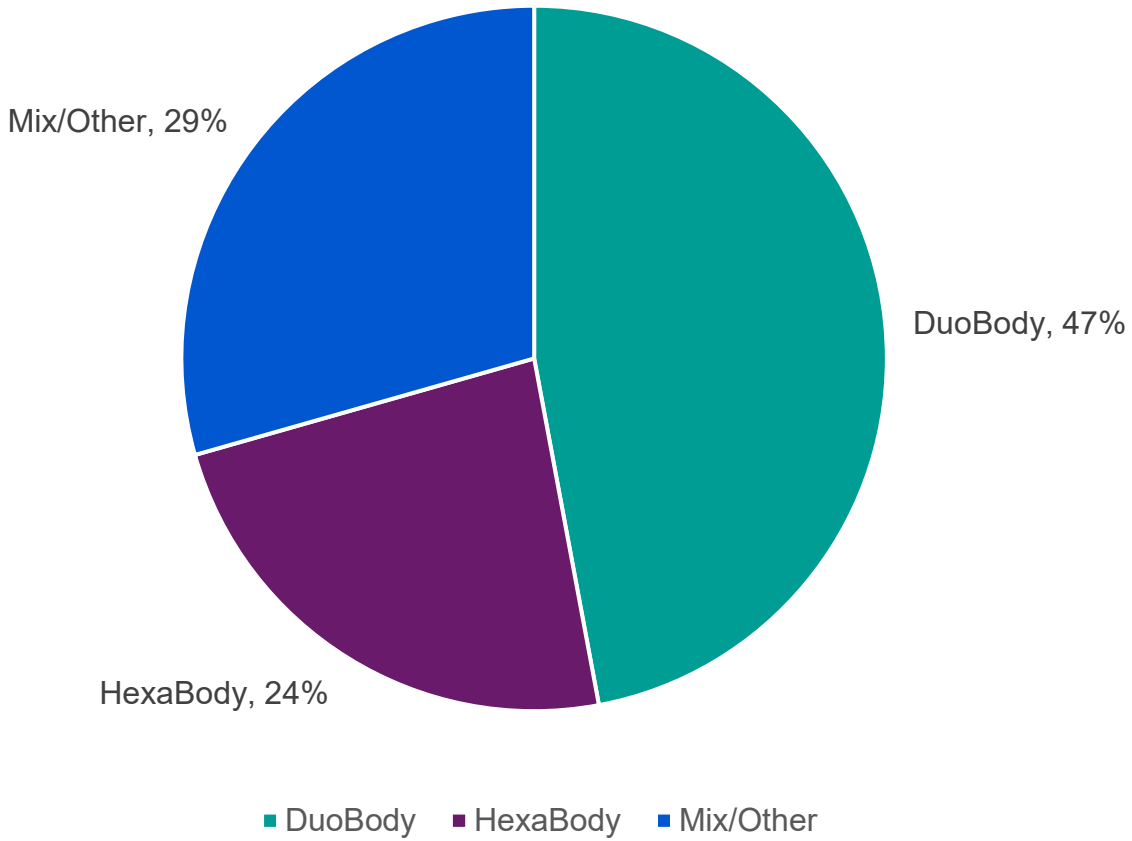
Genmab cumulative investments 2017 to 2023 is ~$5bn** of which ~75% in R&D

Genmab

*Company Collected Consensus pre 4Q 2023
**Sum of operating expenses 2017 to 2023 converted at USD/DKK 6.8

World-class R&D Engine

Innovative Technologies Powering Our Pipeline



DuoBody technology

HexaBody technology

DuoHexaBody® technology

HexElect ® technology

Genmab

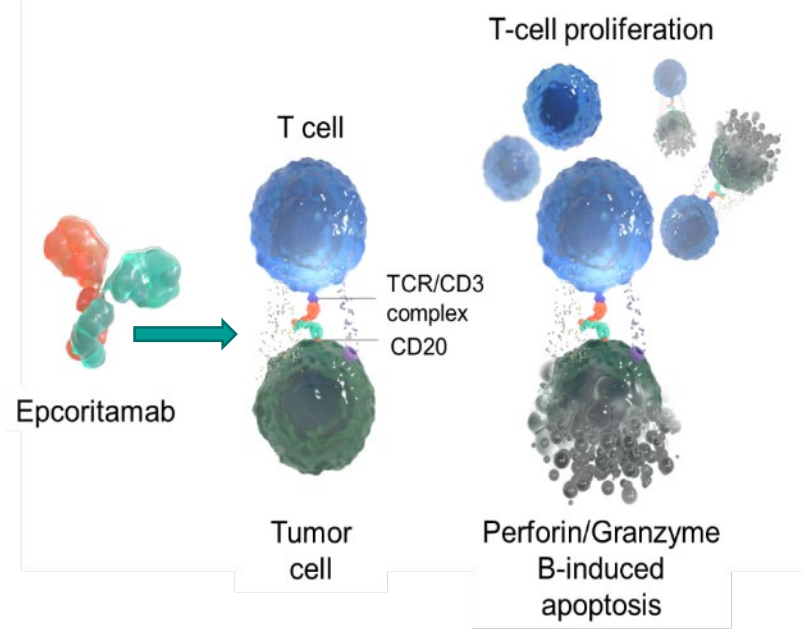
EPKINLY/TEPKINLY (epcoritamab)
Approved in the U.S., Europe and Japan

Approved in U.S., Europe, Japan and other territories[1]

- First bispecific antibody in U.S. to treat adults with R/R DLBCL[1]
- First and only SC bispecific antibody in Europe to treat adults with R/R DLBCL[1]
- First and only bispecific antibody in Japan to treat adults with certain types of R/R LBCL[1]

Bispecific antibody delivered as off the shelf, rapid, SC injection, studied in B-NHL[2,3]

Mechanism of Action



Genmab

1. See local prescribing information for full indication and safety information. U.S. FDA accelerated approval; continued approval may be contingent on verification and confirmation of clinical benefit in a confirmatory trial(s). 2. Engelberts PJ, et al. *EBioMedicine*. 2020;52:102625. 3. van der Horst HJ, et al. *Blood Cancer J*. 2021;11:38.
TCR, T-cell receptor.

Broad & Comprehensive Epcoritamab Development Plan

B-NHL Type		Intervention	Most Advanced Phase
Front-line			
DLBCL		Epcoritamab + R-CHOP	**Phase 3**
	Anthracycline ineligible elderly patients	Epcoritamab +/- lenalidomide	Phase 2
		Epcoritamab + pola-R-CHP	Phase 1b/2
FL		Epcoritamab + R^2	**Phase 3**
		Epcoritamab + BR	Phase 1b/2
Relapsed or refractory			
DLBCL	ASCT ineligible patients	Epcoritamab + lenalidomide	**Phase 3**
		Epcoritamab vs SOC	**Phase 3**
		Epcoritamab + lenalidomide	Phase 1b/2
		Epcoritamab + lenalidomide + ibrutinib	Phase 1b/2
	ASCT eligible patients	Epcoritamab + R-DHAX/C	Phase 1b/2
	ASCT eligible patients	Epcoritamab + R-ICE	Phase 1b/2
	ASCT eligible patients	Epcoritamab + Salvage	**Phase 3**
		Epcoritamab + GemOx	Phase 1b/2
FL		Epcoritamab + R^2	**Phase 3**
		Epcoritamab + lenalidomide	Phase 1b/2
DLBCL & FL	Outpatient	Epcoritamab monotherapy	Phase 2
B-NHL	DLBCL, FL, MCL	Epcoritamab monotherapy	Phase 2
	Japanese patients	Epcoritamab monotherapy	Phase 1/2
	Pediatric patients	Epcoritamab monotherapy	Phase 1
	Chinese patients	Epcoritamab monotherapy and + SOC	Phase 1
CLL	CLL	Epcoritamab + venetoclax	Phase 2*
	Chemo-ineligible frontline & R/R Richter's Syndrome	Epcoritamab monotherapy	Phase 1b/2
	Chemo-eligible frontline & R/R Richter's Syndrome	Epcoritamab + R-CHOP	Phase 1b/2
	Chemo-ineligible Richter's Syndrome	Epcoritamab + lenalidomide	Phase 1b/2
	Double-exposed CLL	Epcoritamab monotherapy	Phase 1b/2
	CLL	Epcoritamab + venetoclax	Phase 1b/2

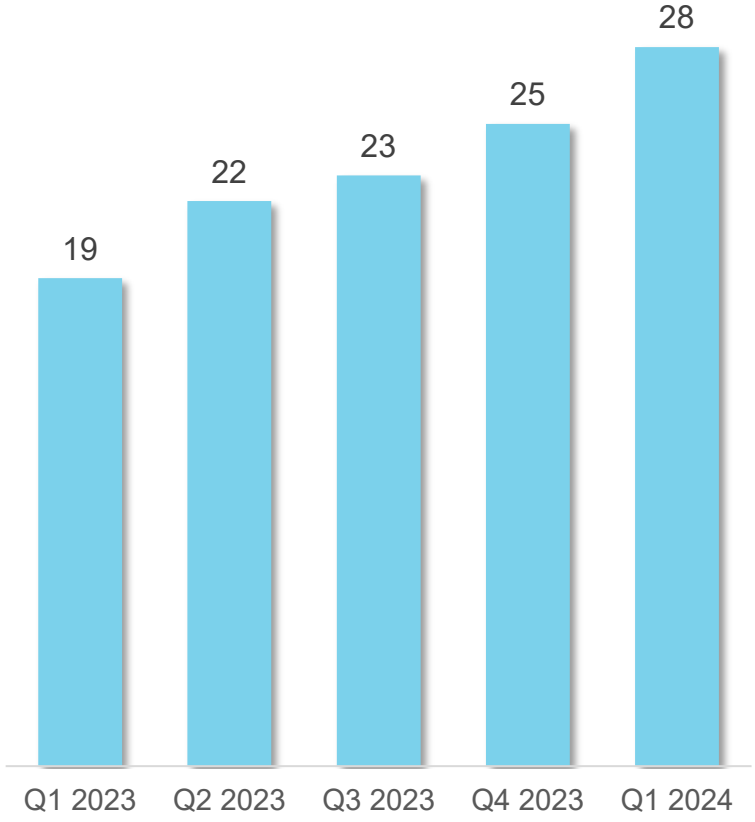
B-NHL: B-cell Non-Hodgkin Lymphoma; BR: bendamustine + rituximab; DLBCL: diffuse large B-cell lymphoma; FL: follicular lymphoma; MCL: mantle cell lymphoma; SOC: standard of care; R2 = Revlimid + rituximab: pola-R-CHP: polatuzumab vedotin, rituximab, cyclophosphamide, HCL, prednisone; R-ICE = rituximab, ifosfamide, carboplatin, and etoposide phosphate

*Trial sponsored by Stichting Hemato-Oncologie voor Volwassenen Nederland (HOVON)

Tivdak (tisotumab vedotin-tftv)
Approved in the U.S.

- U.S. FDA: recurrent or metastatic cervical cancer with disease progression on or after chemo*
- First and only approved ADC for this population
- First Genmab-owned therapy to receive regulatory approval
- Pursuing potential in early lines of cervical cancer and in other solid tumors

Sales (USD M)



*See U.S. prescribing information for full indication and safety information.

Broad Collaboration with BioNTech

Acasunlimab
(GEN1046/BNT311, DuoBody-PD-L1x4-1BB)

- Potential first-in-class, bispecific next gen. immunotherapy
- Potential in solid tumors
- Encouraging clinical activity & manageable safety[1]
- Phase 2 trial in NSCLC[2]

GEN1042
(BNT312, DuoBody-CD40x4-1BB)

- Potential first-in-class bispecific next gen. immunotherapy
- Potential in solid tumors
- Encouraging clinical activity & manageable safety[3]
- Phase 1/2 trials incl. expansion cohorts, combination therapy with pembrolizumab and chemo, currently enrolling

GEN1053
(BNT313, HexaBody-CD27)

- Proprietary HexaBody technology
- Potential in solid tumors
- In pre-clinical studies *in vitro* and *in vivo*, GEN1053 increased T-cell activation, proliferation, cytokine secretion, cytotoxic activity[4]
- FiH study in solid tumors currently ongoing

GEN1059
(BNT314, DuoBody-EpCAMx4-1BB)

- Potential in solid tumors
- Aimed at boosting antitumor immune responses through EpCAM-dependent 4-1BB agonistic activity
- Phase 1/2 clinical trial of GEN1059 in solid tumors is ongoing.

1. Garralda E, et al. SITC 2020. Poster 412..
2. See clinicaltrials.gov for specific trial details
3. Johnson M. et al SITC 2021
4. Nürmberger K. et al SITC 2022

50:50 Collaboration with BioNTech for all investigational medicines

Genmab Owned Investigational Medicines in Clinical Development

GEN3014 (HexaBody-CD38)

- Proprietary HexaBody technology
- Potentially add to/broaden DARZALEX franchise
- Developing under exclusive WW license and option agreement with Janssen
- Phase 1/2 trial in R/R hem. malig. ongoing incl. cohort in R/R multiple myeloma, head-to-head with daratumumab

GEN1047 (DuoBody-CD3xB7H4)

- Proprietary DuoBody technology
- In pre-clin. studies induced T-cell mediated cytotoxicity of B7H4-positive tumor cells
- Potential in solid cancer indications known to express B7H4
- Phase 1/2 trial in solid tumors ongoing

GEN3017 (DuoBody-CD3xCD30)

- Proprietary DuoBody technology
- Potential in hematologic malignancies
- In pre-clin. studies induced potent T-cell mediated cytotoxicity of CD30-expressing tumor cells
- Phase 1/2 trial in R/R classical Hodgkin lymphoma and NHL

Genmab

Building Our Capabilities

Research

Track record of success and investing for tomorrow

- State-of-the-art facilities
- Novel technologies and formats
- External innovation

Development

Scaling up to expand from early to late stage

- Clinical development & operations
- Disease area expertise
- Medical Affairs, Translational Research, Safety and Regulatory

Commercialization

Evolving into end-to-end, fully integrated biotech

- Experienced team in place
- Focused on U.S. and Japan
- Two approved medicines: Tivdak & EPKINLY

Enabling functions to support growth & manage risk | Data Sciences to drive insights

Genmab

Approved Antibody Therapeutics Incorporating Genmab's Innovation

DARZALEX® (daratumumab) injection for intravenous infusion 100 mg/5 mL, 400 mg/20 mL

Developed & commercialized by Janssen

- Redefining Treatment of Multiple Myeloma (MM)*

RYBREVANT® (amivantamab-vmjw) Injection for IV Use 350 mg/7 mL (50 mg/mL)

Co-discovered, developed & commercialized by Janssen

- Approved in U.S. & EU for patients with locally advanced or metastatic NSCLC with EGFR Exon 20 insertion mutations*

Kesimpta® ofatumumab

Commercialized by Novartis

- Approved in U.S., EU & Japan in relapsing multiple sclerosis (RMS)*

TECVAYLI™ (teclistamab)

Discovered, developed & commercialized by Janssen

- Approved in U.S. & EU for patients with relapsed and refractory MM*

TEPEZZA® teprotumumab-trbw

Developed and commercialized by Amgen

- Approved in U.S. in thyroid eye disease (TED)*

TALVEY™ (talquetamab-tgvs) Injection for subcutaneous use 2 mg/mL and 10 mg/mL

Discovered, developed & commercialized by Janssen

- Approved in U.S. & EU for patients with relapsed and refractory MM*

Genmab

*See local prescribing information for full indication and safety information.

2024 Guidance
Recurring Revenue Growth and Focused Investments

Key Figures (DKKM)	2024 Guidance	2024 Guidance Mid - Point
Revenue	18,700 – 20,500	19,600
Royalties	*15,600 – 16,700*	*16,150*
*Net Product Sales/Collaboration Revenue***	*1,700 – 2,200*	*1,950*
Milestones/Reimbursement Revenue	*1,400 – 1,600*	*1,500*
Gross Profit****	18,000 – 19,500	18,750
Operating Expenses****	(12,400) – (13,400)	(12,900)
Operating Profit	4,600 – 7,100	5,850

Genmab Net Product Sales/Collaboration Revenue increasingly contributing to revenue growth

Growth in operating expenses to support expanding mid / late-stage development programs – EPKINLY, Tivdak, Acasunlimab (GEN1046) and GEN1042

Underlying profitability back to significant growth

**Mid-point of guidance range*

***Net Product Sales and Collaboration Revenue consists of EPKINLY Net Product Sales in the U.S. and Japan and Tivdak (Genmab's share of net profits) in the U.S.*

****Operating Expenses Range excludes Cost of Product Sales Range, which is included in Gross Profit Range*

All amounts in DKK millions unless otherwise noted

2024 guidance assumes a USD/DKK exchange rate of 6.8

2024 Priorities:

Further Advancing Our Differentiated Product Pipeline Towards The Market

Bring Our Own Medicines to Patients & Expand Our Markets

EPKINLY[1]
- Initiate three Phase 3 trials
- Expand epcoritamab label to include R/R FL

Tivdak[2]
- Initiate Phase 3 study in H&N

Execute successful launches & growth in key markets

Build World-class Differentiated Pipeline

Acasunlimab (GEN1046)[3]
- Initiate Phase 3 study (2L NSCLC)

GEN1042 (DuoBody-CD40x4-1BB)[3]
- Phase 2 data and determine next steps

Expand and advance proprietary product portfolio

Invest in Our People, Culture & Society

Further scale organization aligned with differentiated antibody product portfolio growth and future launches

Become a Leading Integrated Biotech Innovation Powerhouse

Use solid financial base to grow and broaden antibody product and technology portfolio

Genmab

1. Co-development w/ AbbVie; 2. Co-development w/ Pfizer; 3. Co-development w/ BioNTech

Driving Towards Our 2030 Vision

- **Clear Vision**
- **Focused Strategy**
- **Effective Execution**

Genmab Today

2 approved medicines

Significant & growing recurring revenues

Strong rationale to invest

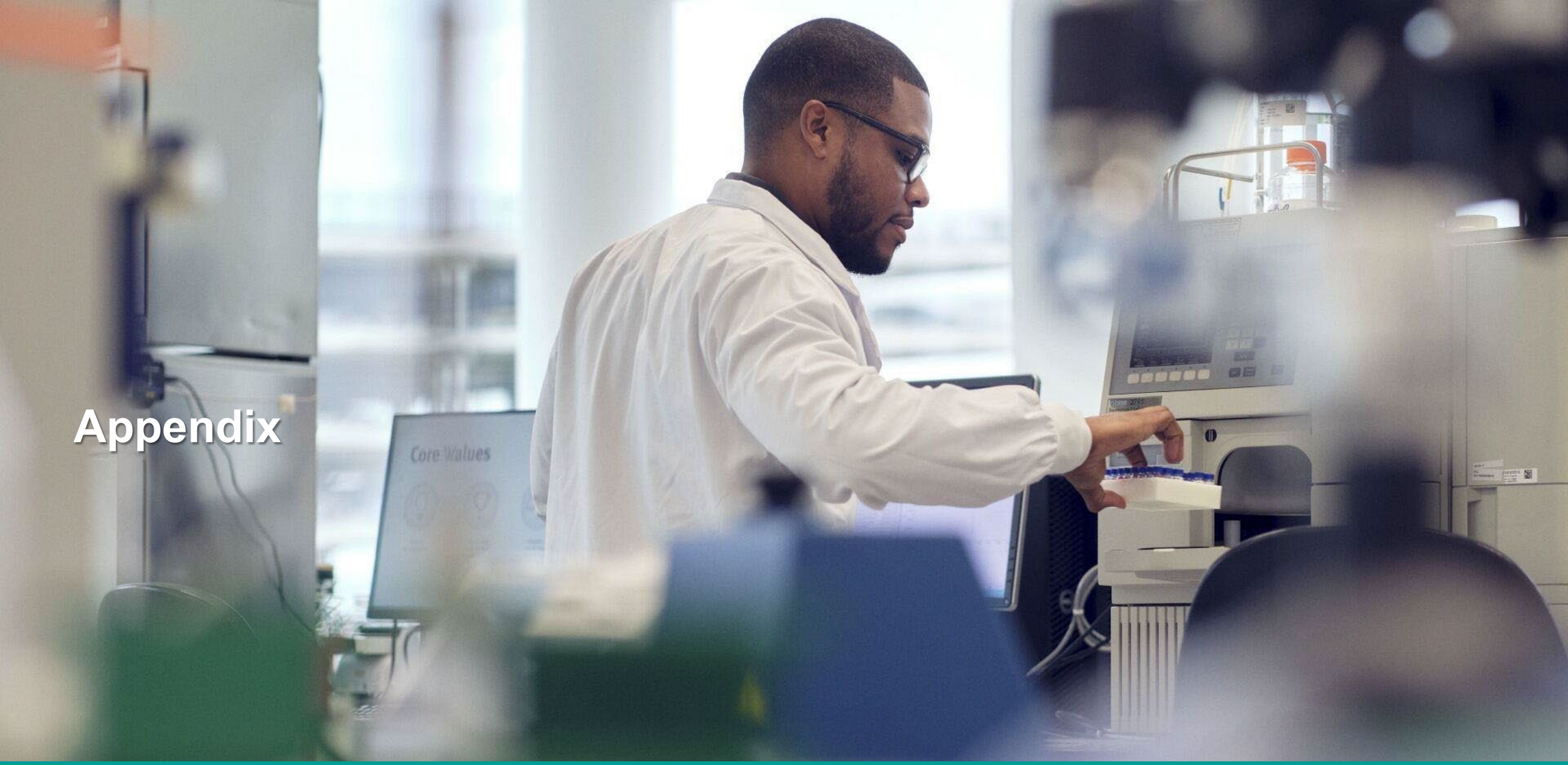
Focused & disciplined

Our Future

Fully-integrated biotech innovation powerhouse

Genmab

Appendix



Genmab

genmab.com

A Leading International Biotech With Large Free Float

- Ordinary shares: Nasdaq Copenhagen, DK
- ADSs: Nasdaq Global Select USA
- Shares world-wide incl: US, DK, NL, UK
- Market Cap:
  - ~ DKK 144bn
  - ~ USD 21bn
- Shares outstanding: ~66M

As of April 26, 2024

Our Approach to Corporate Social Responsibility (CSR)

Genmab is committed to being a socially responsible and sustainable biotechnology company. Our commitment to CSR is anchored in our company's purpose, values and vision. Being socially responsible is fundamental to the way we do business.

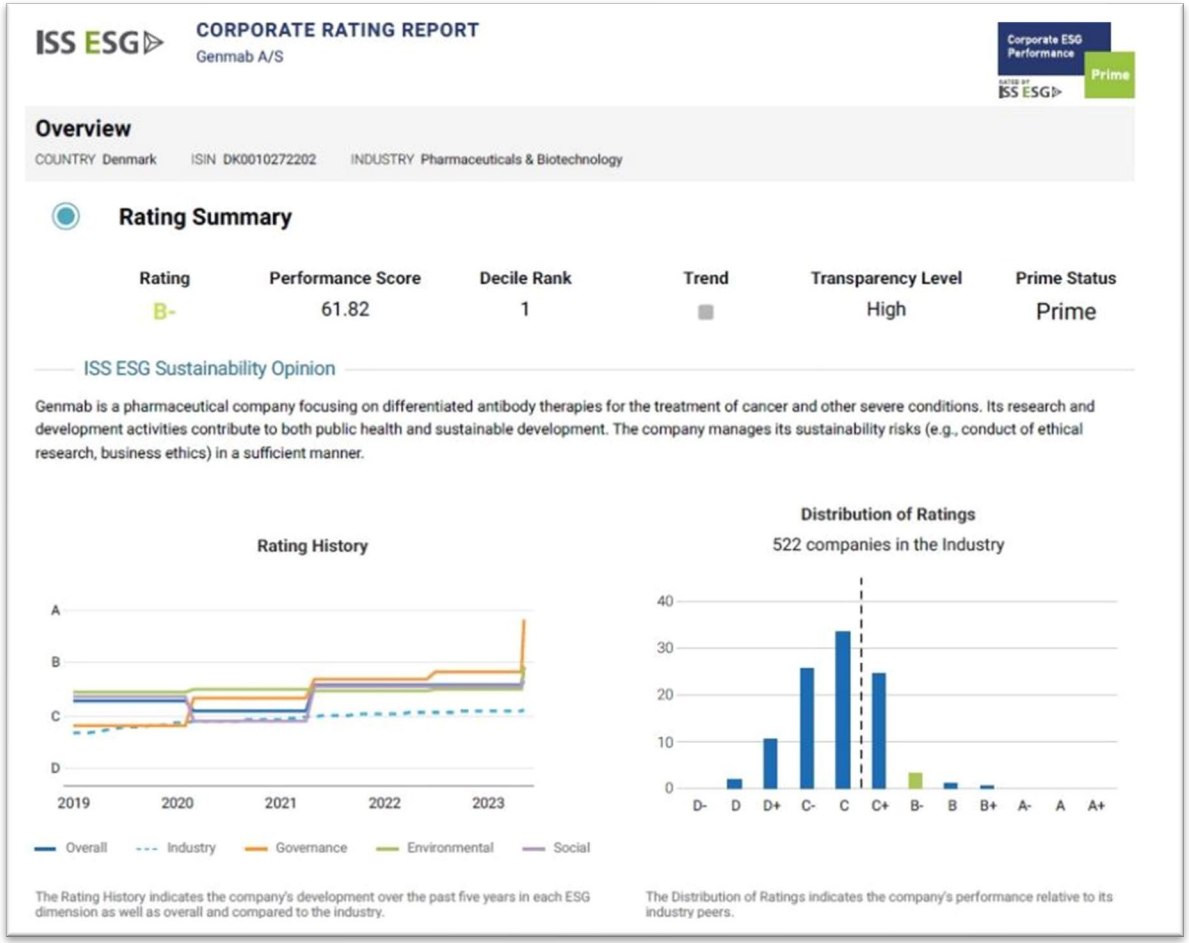
Our Approach

Our Pillars

Our Commitment to the UN Sustainable Development Goals

Genmab

Genmab's ESG Performance: Well-Rated Company



ISS ESG

CORPORATE RATING REPORT

Genmab A/S

Corporate ESG Performance Prime

RATED BY ISS ESG

Overview

COUNTRY Denmark ISIN DK0010272202 INDUSTRY Pharmaceuticals & Biotechnology

Rating Summary

Rating	Performance Score	Decile Rank	Trend	Transparency Level	Prime Status
B-	61.82	1		High	Prime

ISS ESG Sustainability Opinion

Genmab is a pharmaceutical company focusing on differentiated antibody therapies for the treatment of cancer and other severe conditions. Its research and development activities contribute to both public health and sustainable development. The company manages its sustainability risks (e.g., conduct of ethical research, business ethics) in a sufficient manner.

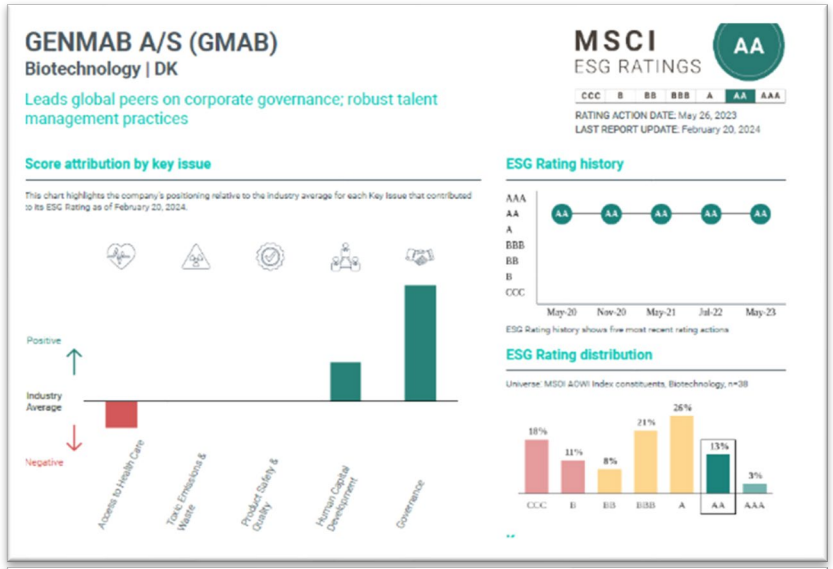
Rating History

The Rating History indicates the company's development over the past five years in each ESG dimension as well as overall and compared to the industry.

Distribution of Ratings

522 companies in the Industry

The Distribution of Ratings indicates the company's performance relative to its industry peers.



GENMAB A/S (GMAB)

Biotechnology | DK

Leads global peers on corporate governance; robust talent management practices

MSCI ESG RATINGS AA

CCC B BB BBB A AA AAA

RATING ACTION DATE: May 26, 2023

LAST REPORT UPDATE: February 20, 2024

Score attribution by key issue

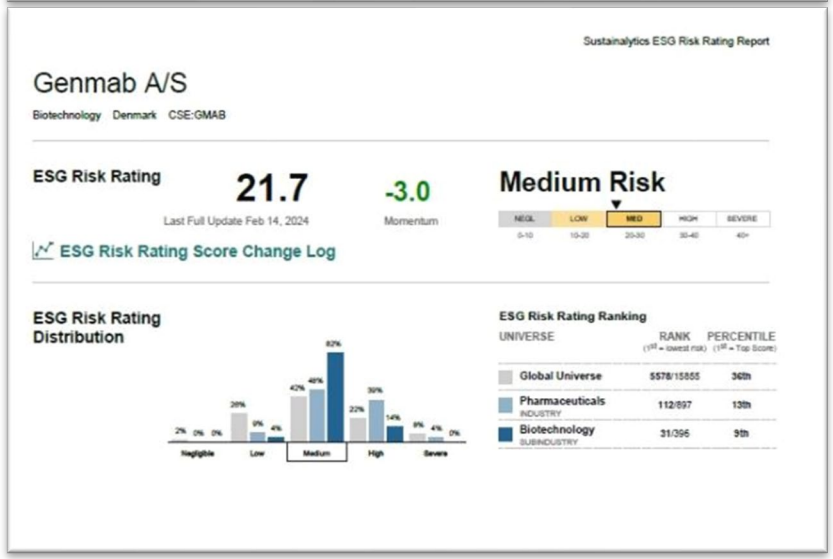
This chart highlights the company's positioning relative to the industry average for each Key Issue that contributed to its ESG Rating as of February 20, 2024.

ESG Rating history

ESG Rating history shows five most recent rating actions

ESG Rating distribution

Universe: MSCI ACWI Index constituents, Biotechnology, n=38



Sustainalytics ESG Risk Rating Report

Genmab A/S

Biotechnology Denmark CSE:GMAB

ESG Risk Rating **21.7** -3.0

Last Full Update Feb 14, 2024 Momentum

Medium Risk

NEGL LOW MED HIGH SEVERE

0-10 10-20 20-30 30-40 40+

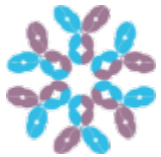
ESG Risk Rating Score Change Log

ESG Risk Rating Distribution

ESG Risk Rating Ranking

UNIVERSE	RANK (1st = lowest risk)	PERCENTILE (1st = Top Score)
Global Universe	5578/15855	36th
Pharmaceuticals INDUSTRY	112/897	13th
Biotechnology SUBINDUSTRY	31/396	9th

Innovation Powerhouse:
Cutting Edge Proprietary Technologies

Technology		Principle	Applications
DuoBody		Bispecific antibodies	Dual targeting
HexaBody		Target-mediated enhanced hexamerization	Enhanced potency
DuoHexaBody		Bispecific antibodies with target-mediated enhanced hexamerization	Dual targeting + enhanced potency
HexElect		Two co-dependent antibodies with target-mediated enhanced hexamerization	Dual targeting + enhanced potency & selectivity

Genmab

Innovative Pipeline: Genmab's Proprietary[1] Products

Product	Developed By	Disease Indications	Most Advanced Development Phase (Preclinical / 1 / 2 / 3)
Epcoritamab	Co-development Genmab / AbbVie	Relapsed/refractory DLBCL	3
		Relapsed/refractory FL	3
		First line DLBCL	3
		First line FL	3
		B-cell NHL	2
		Relapsed/refractory CLL & Richter's Syndrome	1
		Aggressive mature B-cell neoplasms in pediatric patients	Preclinical
Tisotumab vedotin	Co-development Genmab / Pfizer	Cervical cancer	3
		Solid tumors	2
Acasunlimab (GEN1046/BNT311, DuoBody-PD-L1x4-1BB)	Co-development Genmab / BioNTech	NSCLC	2
		Solid tumors	1
DuoBody-CD40x4-1BB (GEN1042/BNT312)	Co-development Genmab / BioNTech	Solid tumors	2
HexaBody-CD38 (GEN3014)	Genmab[2]	Hematologic malignancies	2
DuoBody-CD3xB7H4 (GEN1047)	Genmab	Solid tumors	2
DuoBody-CD3xCD30 (GEN3017)	Genmab	Relapsed/refractory Hodgkin lymphoma & NHL	1
HexaBody-CD27 (GEN1053/BNT313)	Co-development Genmab / BioNTech	Solid tumors	Preclinical
DuoBody-EpCAMx4-1BB (GEN1059/BNT314)	Co-development Genmab / BioNTech	Solid tumors	Preclinical
GEN1056 (BNT322)	Co-development Genmab / BioNTech	Solid tumors	Preclinical

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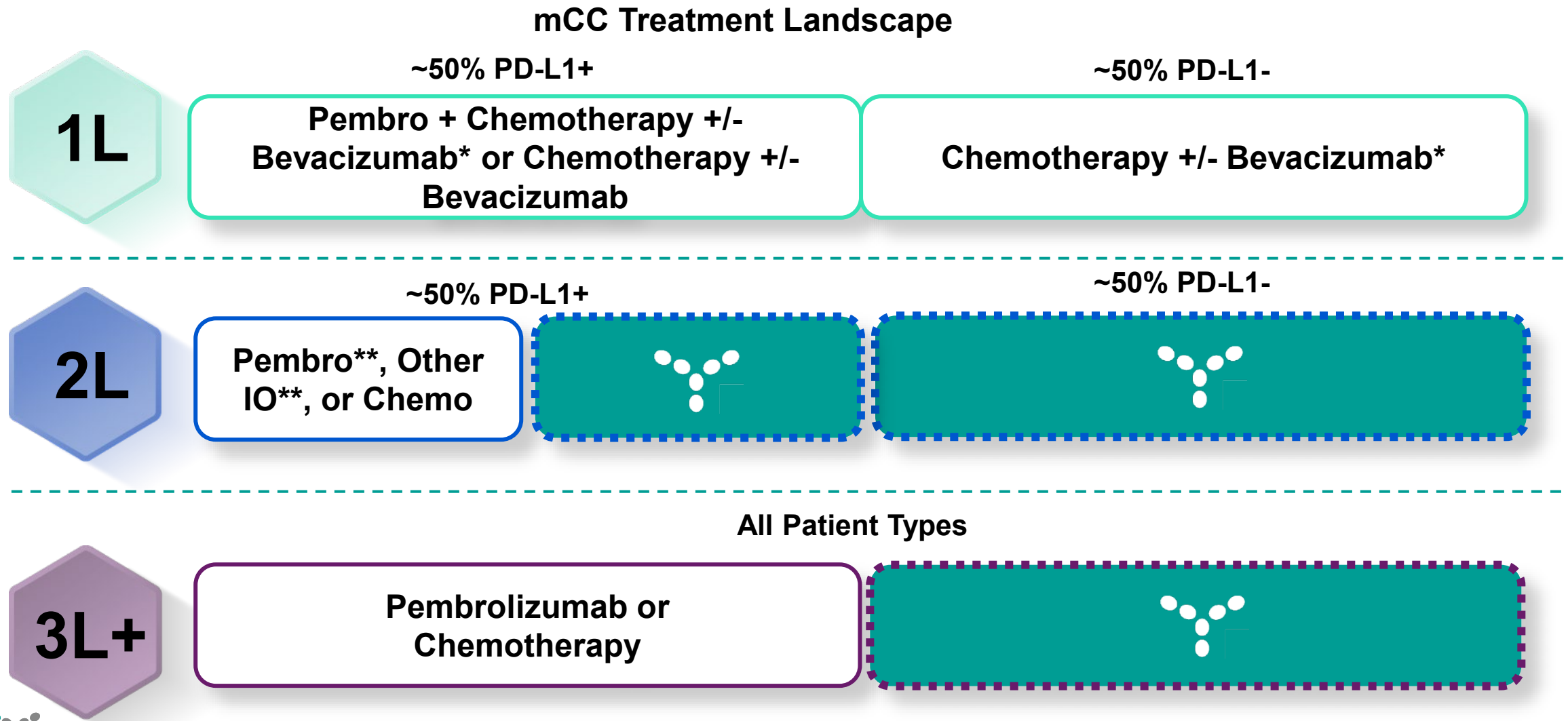
[1]Certain product candidates in development with partners, as noted; [2]Genmab is developing HexaBody-CD38 in an exclusive worldwide license and option agreement with Janssen Biotech, Inc

Programs Incorporating Genmab's Innovation and Technology, ≥Phase 2 Development

Product	Technology	Discovered and/or Developed By	Disease Indications	Most Advanced Development Phase
				Pre-clinical 1 2 3
Daratumumab	UltiMAb*	Janssen	MM	
			AL Amyloidosis	
Teprotumumab	UltiMAb	Amgen	TED	
Amivantamab	DuoBody	Janssen	NSCLC	
			Advanced or metastatic gastric or esophageal cancer	
			Hepatocellular carcinoma	
			Advanced or metastatic colorectal cancer	
Teclistamab	DuoBody	Janssen	MM	
Talquetamab	DuoBody	Janssen	MM	
Inclacumab	UltiMAb	Pfizer	Vaso-occlusive crises in sickle cell disease	
Mim8	DuoBody	Novo Nordisk	Hemophilia A	
Ordesekimab (PRV-015, AMG 714)	UltiMAb	Sanofi	Celiac disease	
Lu AF82422	UltiMAb	Lundbeck	Multiple system atrophy	

Genmab

Our Goal in Cervical Cancer: Establish Tivdak® as a Clear Choice in 2L+ Settings



Source: Kantar Treatment Architecture: Cervical Cancer; NCCN Treatment Guidelines;

*Pembrolizumab is approved in combination with chemo +/- bev in 1L for PD-L1 positive patients only in the US at this time, global filings to follow. Other IOs are also being evaluated in 1L treatment

**Pembrolizumab is approved for 2L r/mCC in the US; not approved in JPN or EU. Nivo is on NCCN guidelines for PD-L1 positive patients

Rooted in Science, Inspired by Patients

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