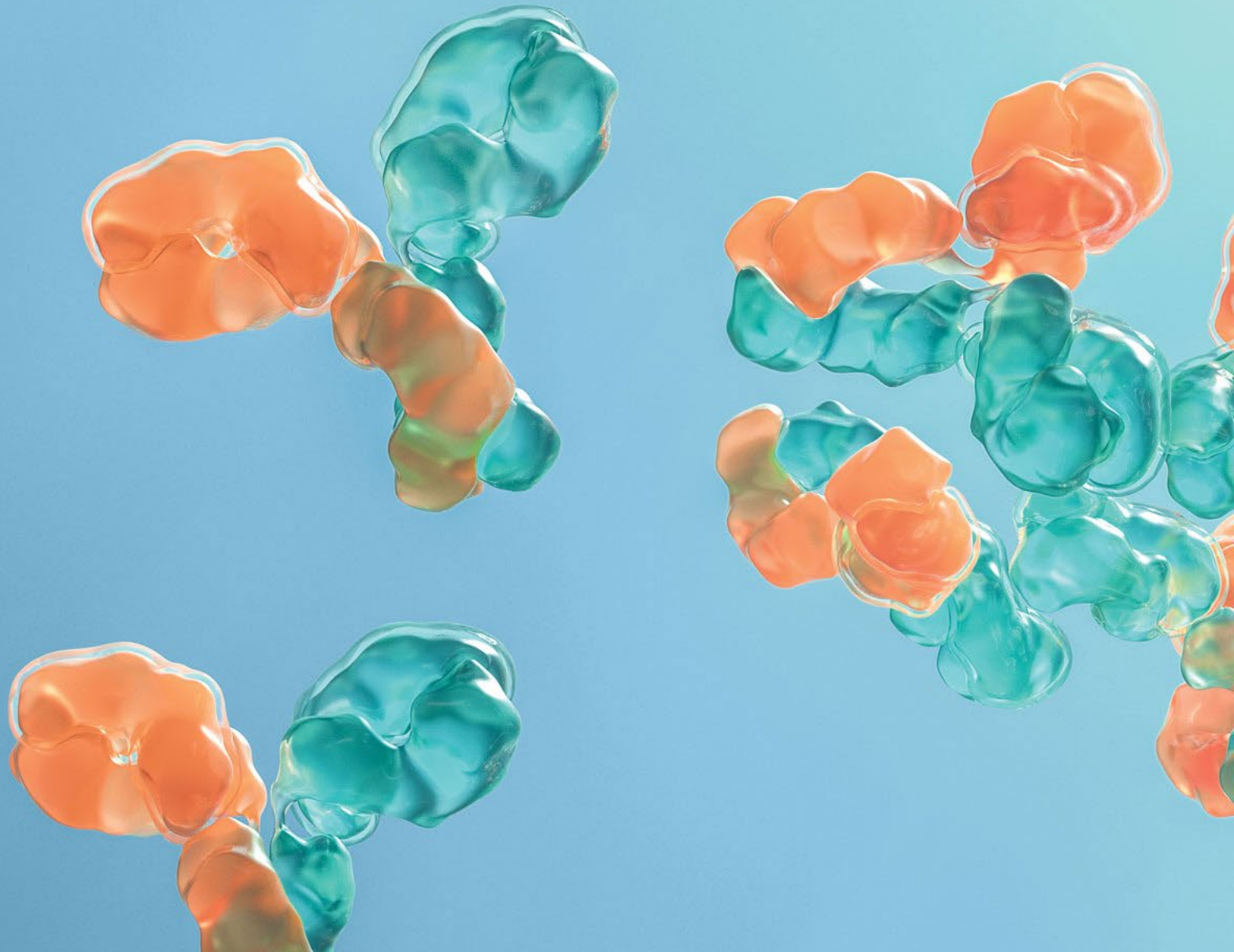




Rooted in Science, Inspired by Patients

Investor Presentation

August 2023



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



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.

Solid Track Record and Financial Foundation Fuel Our Growth

- ✓ 42 Cumulative INDs since 1999
- ✓ Innovative clinical pipeline: 9 Genmab owned $\geq 50\%$
- ✓ 7 approved medicines based on Genmab's innovation and antibody expertise
- ✓ Two medicines approved in the U.S.: Tivdak[®] (tisotumab vedotin-tftv) and EPKINLY[™] (epcoritamab-bysp)
- ✓ Growing recurring revenue
- ✓ Sustainably profitable with cash position of ~USD 3.5B
- ✓ Investing in our capabilities
- ✓ Experienced, international leadership team



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

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The Genmab Model



Deep insight into antibody biology & disease targets

- Solid tumors
- B-cell NHL
- Multiple Myeloma



Proprietary technologies enable us to build a world-class pipeline

- DuoBody®
- HexaBody®
- DuoHexaBody®
- HexElect®



Match in-house expertise with strategic collaborations & partnerships

- Discovery / academic
- Technology based
- Product based



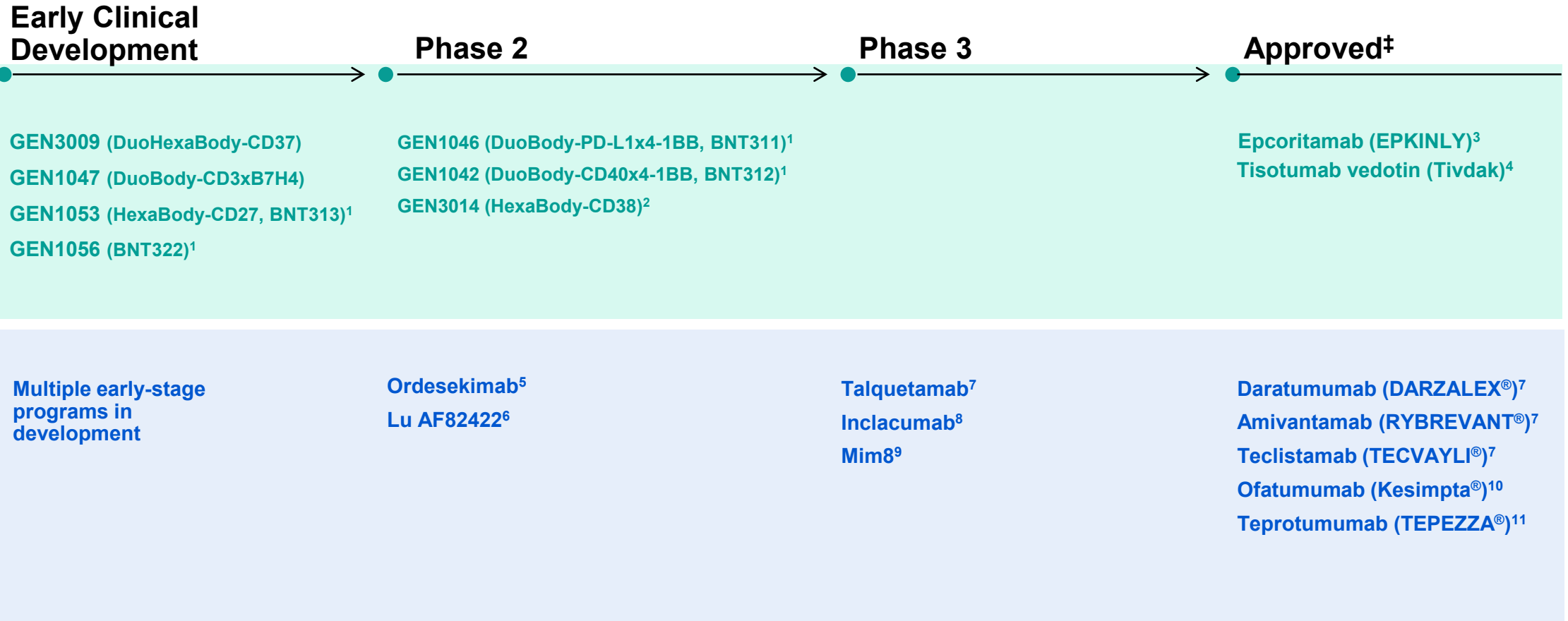
Strong pipeline of potential 1st-in-class / best-in-class products

- Tisotumab vedotin
- Epcoritamab
- DuoBody-PD-L1x4-1BB
- DuoBody-CD40x4-1BB
- DuoHexaBody-CD37
- HexaBody-CD38
- DuoBody-CD3xB7H4
- HexaBody-CD27



Tisotumab vedotin is being co-developed and co-promoted in the U.S. by Genmab and Seagen; Epcoritamab is being co-developed by Genmab and AbbVie; DuoBody-PD-L1x4-1BB (GEN1046/BNT311), DuoBody-CD40x4-1BB (GEN1042/BNT312) and HexaBody-CD27 (GEN1053/BNT313) are being co-developed by Genmab and BioNTech; HexaBody-CD38 is being developed in exclusive worldwide license and option agreement with Janssen.

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

¹Co-development with BioNTech; ²Genmab is developing HexaBody-CD38 in an exclusive worldwide license and option agreement with Janssen; ³Co-development with AbbVie; ⁴Co-development with Seagen; ⁵Development by Provention Bio; ⁶Development by Lundbeck; ⁷Development and/or discovery by Janssen; ⁸Development by Pfizer (Global Blood Therapeutics); ⁹Development by Novo Nordisk; ¹⁰Development by Novartis; ¹¹Development by Horizon Therapeutics

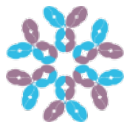
World-class R&D Engine



DuoBody technology



HexaBody technology



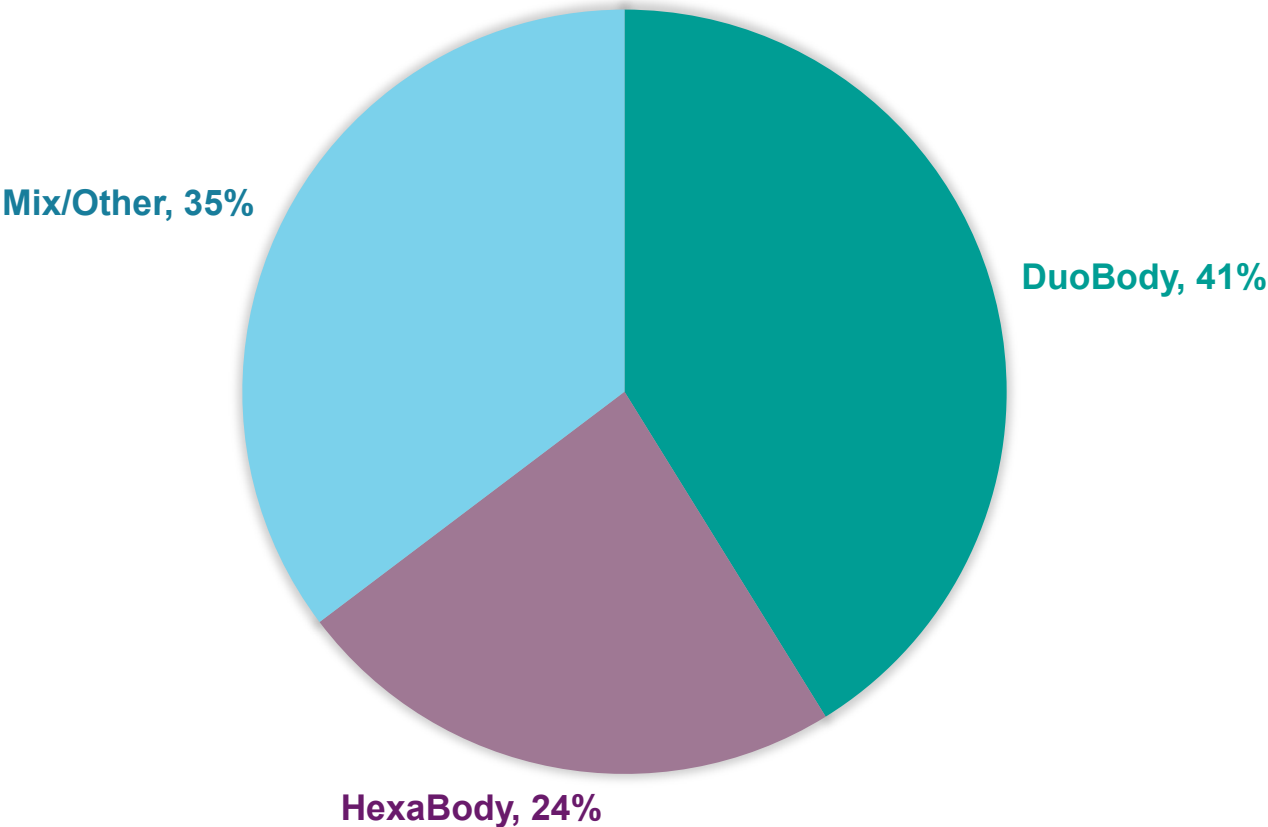
DuoHexaBody technology



HexElect technology



Innovative Technologies Powering Our Pipeline

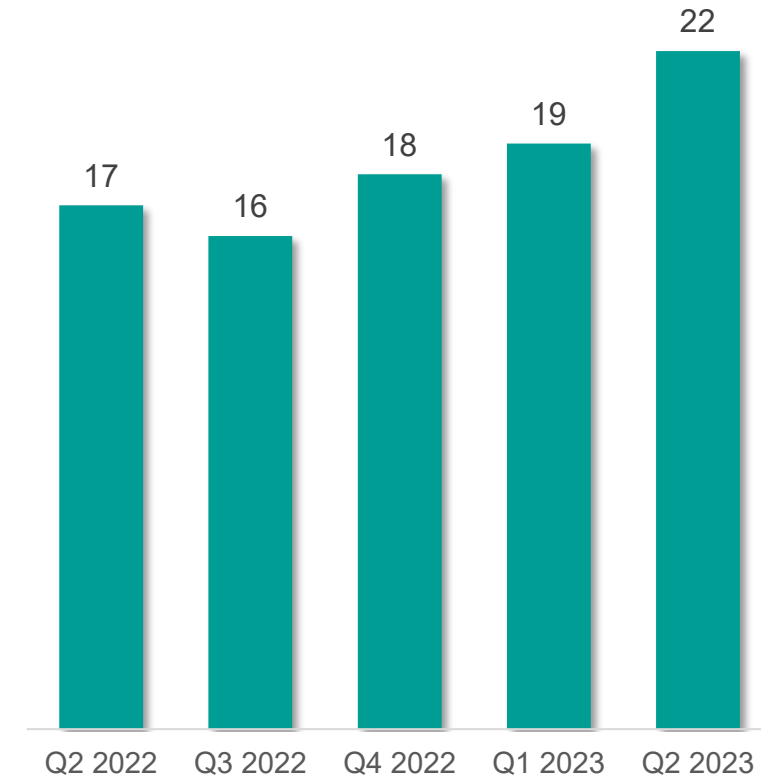


First Genmab Approved Therapy: Tivdak (tisotumab vedotin-tftv) in Collaboration with Seagen

- U.S FDA accelerated approval: 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)

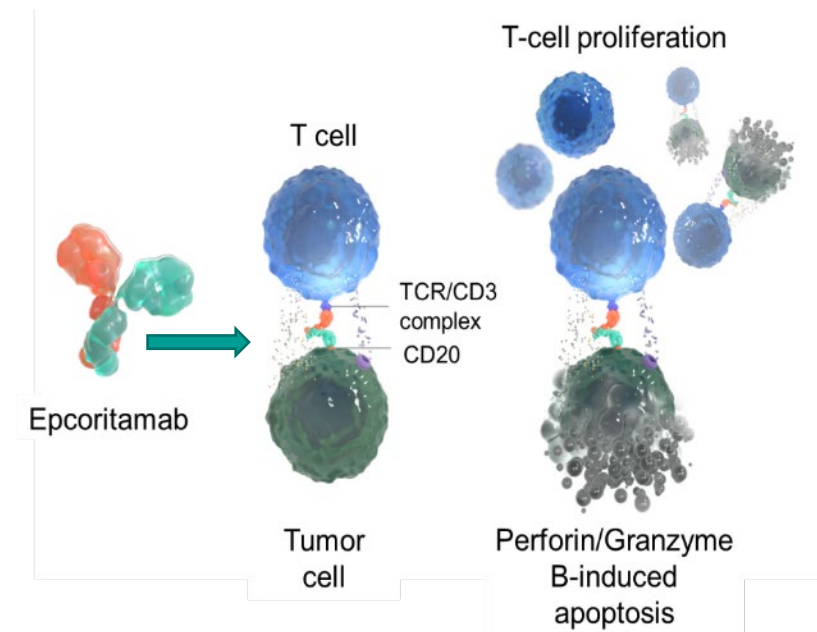


Second Genmab Approved Therapy: EPKINLY (epcoritamab-bysp) in Collaboration with AbbVie

- U.S FDA accelerated approval: relapsed or refractory (R/R) diffuse large B-cell lymphoma (DLBCL)¹
- First bispecific antibody in U.S. to treat adults with R/R DLBCL¹
- Second Genmab-owned therapy to receive regulatory approval
- Bispecific antibody delivered as off the shelf, rapid, SC injection, studied in B-NHL^{2,3}



Mechanism of Action



1. See U.S. 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	Study Phase
DLBCL, FL, MCL and other histologies		Pre-clinical11/223
Front-line		
DLBCL	Epcoritamab + R-CHOP	EPCORE DLBCL-2 (Ph 3, NCT05578976)
	Epcoritamab +/- lenalidomide	EPCORE DLBCL-3 (Ph 2, NCT05660967)
	Epcoritamab + R-CHOP	EPCORE NHL-2 (Ph 1b/2, NCT04663347)
	Epcoritamab + pola-R-CHOP	EPCORE NHL-5 (Ph 1b/2, NCT05283720)
FL	Epcoritamab + BR	EPCORE NHL-2 (Ph 1b/2, NCT04663347)
Relapsed or refractory		
B-NHL (DLBCL, FL, MCL)	Epcoritamab monotherapy	EPCORE NHL-1 (Ph 1/2, NCT03625037)
ASCT eligible DLBCL	Epcoritamab + R-DHAX/C	EPCORE NHL-2 (Ph 1b/2, NCT04663347)
DLBCL	Epcoritamab + GemOx	EPCORE NHL-2 (Ph 1b/2, NCT04663347)
	Epcoritamab + lenalidomide	EPCORE NHL-5 (Ph 1b/2, NCT05283720)
	Epcoritamab + lenalidomide + ibrutinib	EPCORE NHL-5 (Ph 1b/2, NCT05283720)
	Epcoritamab vs SOC	EPCORE DLBCL-1 (Ph 3, NCT04628494)
FL	Epcoritamab + R ²	EPCORE NHL-2 (Ph 1b/2, NCT04663347)
	Epcoritamab + R ²	EPCORE FL-1 (Ph 3, NCT05409066)
DLBCL and FL (outpatient)	Epcoritamab monotherapy	EPCORE NHL-6 (Ph 2, NCT05451810)
B-NHL (pediatric)	Epcoritamab monotherapy	EPCORE Peds-1 (Ph 1, NCT05206357)
B-NHL (Chinese patients)	Epcoritamab monotherapy and + SOC	EPCORE NHL-4 (Ph 1, NCT05201248)
B-NHL (Japanese patients)	Epcoritamab monotherapy	EPCORE NHL-3 (Ph 1/2, NCT04542824)
CLL		
Relapsed or refractory & Richter's Syndrome	Epcoritamab monotherapy	EPCORE CLL-1 (Ph 1/2, NCT04623541)

Broad Collaboration with BioNTech



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

- First-in-class, bispecific next gen. immunotherapy
- Potential in solid tumors
- Encouraging clinical activity & manageable safety¹
- Phase 2 trial in combo. with pembrolizumab in recurrent NSCLC and Phase 1/2 trial - expansion cohorts ongoing in other solid tumors



DuoBody-CD40x4-1BB (GEN1042/BNT312)

- First-in-class bispecific next gen. immunotherapy
- Potential in solid tumors
- Encouraging clinical activity & manageable safety²
- Phase 1/2 trials incl. expansion cohorts, combination therapy with pembrolizumab and chemo, currently enrolling



HexaBody-CD27 (GEN1053/BNT313)

- Proprietary HexaBody technology
- Potential in solid tumors
- In pre-clinical studies *in vitro* and *in vivo*, HexaBody-CD27 increased T-cell activation, proliferation, cytokine secretion, cytotoxic activity³
- FiH study in solid tumors currently ongoing



1. Garralda E, et al. SITC 2020. Poster 412..

2. Johnson M. et al SITC 2021

3. Nürnberg K. et al SITC 2022

50:50 Collaboration with BioNTech for all investigational medicines

Genmab Owned Investigational Medicines in Clinical Development

DuoHexaBody-CD37 (GEN3009)

- Combination of DuoBody & HexaBody platforms
- Novel target for hematological malignancies
- Unique MoA
- Dose escalation ongoing incl. arm in combo w/ epcoritamab

HexaBody-CD38 (GEN3014)

- Proprietary HexaBody technology
- Promising data in pre-clinical models for MM, DLBCL & AML
- Potentially add to/broaden DARZALEX franchise
- Preliminary dose escalation data: ASH 2022
- Developing under exclusive WW license and option agreement with Janssen

DuoBody-CD3xB7H4 (GEN1047)

- Proprietary DuoBody technology
- In preclin. studies, induced T-cell mediated cytotoxicity of B7H4-positive tumor cells
- Potential in solid cancer indications known to express B7H4
- Dose escalation ongoing

Building Our Capabilities



Research

Track record of success and investing for tomorrow

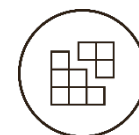
- State-of-the-art facilities
- Novel technologies and formats
- External innovation



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 medicines in U.S.: Tivdak & EPKINLY

Enabling functions to support growth & manage risk

Data Sciences to drive insights

Approved Antibody Therapeutics Incorporating Genmab's Innovation



Developed & commercialized by Janssen

Redefining Treatment of Multiple Myeloma (MM)*



Developed & commercialized by Novartis

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



Developed and commercialized by Horizon Therapeutics

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



Medicines Incorporating Genmab's DuoBody Technology



Developed & commercialized by Janssen

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



Developed & commercialized by Janssen

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

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

2023 Guidance

Recurring Revenue Growth and Focused Investments

Key Figures (DKKM)	Guidance	~USDM
Revenue	15,500 – 16,500	2,279 – 2,426
Operating Expenses	(10,400) – (10,900)	(1,529) – (1,603)
Operating Profit	4,500 – 6,000	662 – 882

DARZALEX net sales of USD 9.8B to USD 10.0B

DARZALEX royalties of ~DKK 11.1B to ~DKK 11.4B to drive ~17%* growth in recurring revenue (29% on an operational basis)

Growth in operating expenses related to increased and accelerated investment for epcoritamab clinical trials and progression of other pipeline products

Significant underlying profitability

2023 Priorities:

Further Advancing Our
Differentiated Product
Pipeline Towards The Market



Bring Our Own Medicines to Patients

EPKINLY¹

- Launch in R/R DLBCL²
- Submit an sBLA³
- Broaden clinical development program

Tivdak⁴

- Progress successful uptake in 2L+ recurring or metastatic cervical cancer patients
- Progress clinical development program



Invest in Our People & Culture

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



Build World-class Differentiated Pipeline

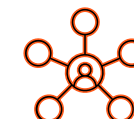
DuoBody-CD40x4-1BB (GEN1042/BNT312)⁵

- Establish efficacy and safety data in solid tumor indication
- Progress towards late-stage clinical development

DuoBody-PD-L1x4-1BB (GEN1046/BNT311)⁵

- Establish proof of concept data in solid tumor indication

Expand and advance proprietary clinical product portfolio



Become a Leading Integrated Biotech Innovation Powerhouse

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

1. Co-development w/ AbbVie; 2. Subject to regulatory approvals; 3. Subject to supportive U.S. FDA feedback; 4. Co-development w/ Seagen; 5. 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



Appendix

A Leading International Biotech With Large Free Float

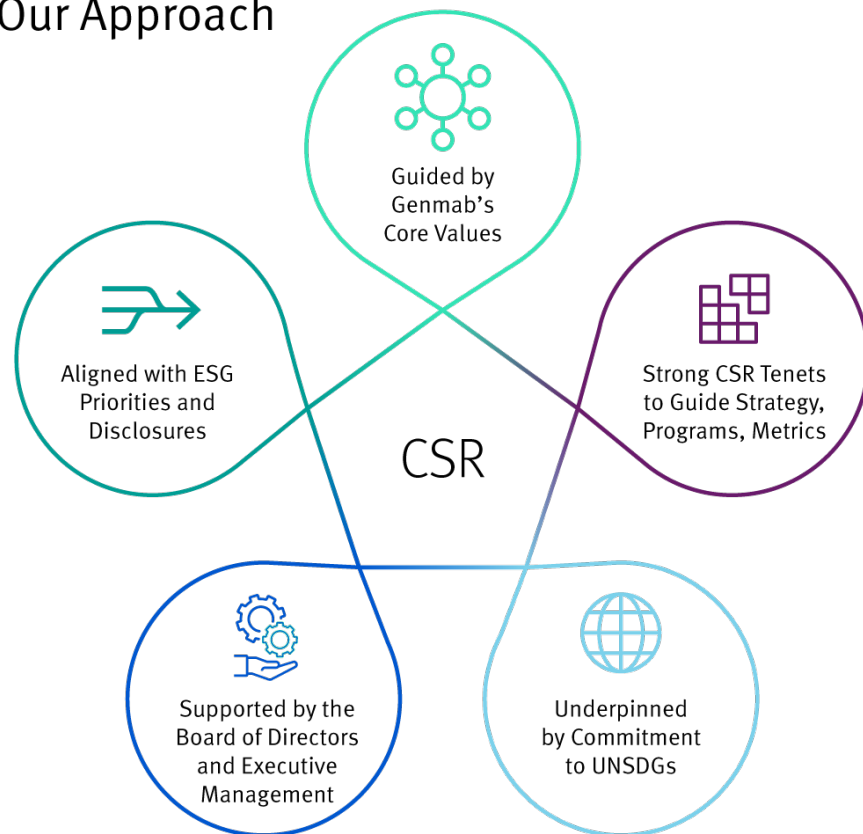
- Ordinary shares: Nasdaq Copenhagen, DK
- ADSs: Nasdaq Global Select USA
- Shares world-wide incl: US, DK, NL, UK
- Market Cap:
 - ~ DKK 184bn
 - ~ USD 27bn
- Shares outstanding: ~66M



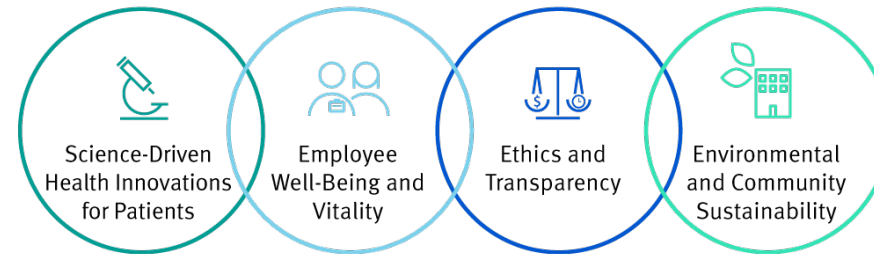
Our Approach to Corporate Social Responsibility (CSR)

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's ESG Performance: Well-Rated Company

GENMAB A/S (GMAB)
Biotechnology | DK
Robust governance and talent management

Score attribution by key issue

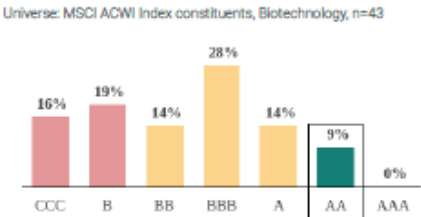
This chart highlights the company's positioning relative to the industry average for each Key Issue that contributed to its ESG Rating as of August 11, 2022.



ESG Rating history



ESG Rating distribution



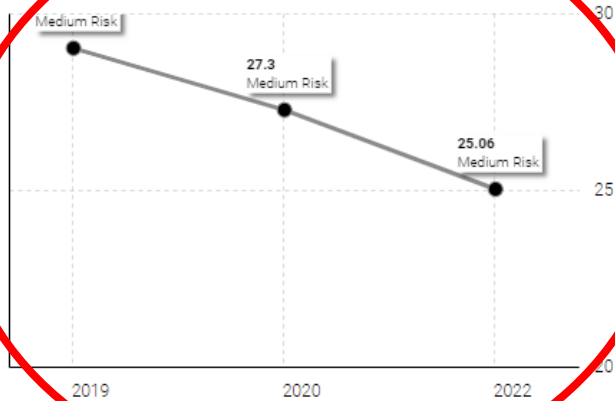
ESG Risk Rating

COMPREHENSIVE FRAMEWORK ?



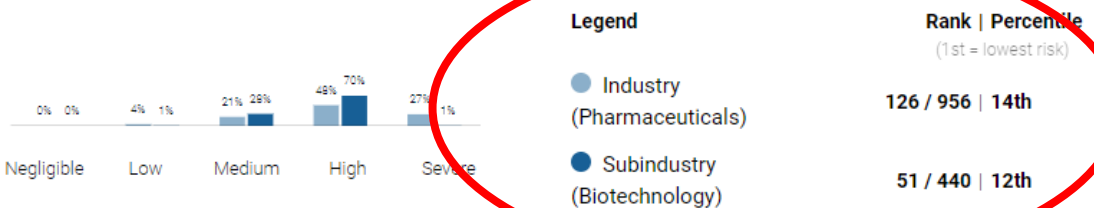
The company is at medium risk of experiencing material financial impacts from ESG factors, due to its medium exposure and average management of material ESG issues. Furthermore, the company has not experienced significant controversies.

ESG Risk Rating History



LEARN MORE ABOUT OUR METHODOLOGY

ESG Risk Rating Distribution



Legend		Rank Percentile
		(1st = lowest risk)
Industry (Pharmaceuticals)		126 / 956 14th
Subindustry (Biotechnology)		51 / 440 12th



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

Innovative Pipeline: Genmab's Proprietary¹ Products

Product	Developed By	Disease Indications	Most Advanced Development Phase				
			Pre-clinical	1	1/2	2	3
Tisotumab vedotin	Co-development Genmab / Seagen	Cervical cancer					
		Solid tumors					
Epcoritamab	Co-development Genmab / AbbVie	Relapsed/refractory DLBCL					
		Relapsed/refractory FL					
		First Line DLBCL					
		B-cell NHL					
		Relapsed/refractory CLL & Richter's Syndrome					
		Indolent NHL pediatric patients					
(DuoBody-PD-L1x4-1BB (GEN1046/BNT311)	Co-development Genmab / BioNTech	NSCLC					
		Solid tumors					
DuoBody-CD40x4-1BB (GEN1042/BNT312)	Co-development Genmab / BioNTech	Solid tumors					
HexaBody-CD38 (GEN3014)	Genmab ²	Hematologic malignancies					
DuoHexaBody®-CD37 (GEN3009)	Genmab	Hematologic malignancies					
DuoBody-CD3xB7H4 (GEN1047)	Genmab	Solid tumors					
HexaBody-CD27 (GEN1053/BNT313)	Co-development Genmab / BioNTech	Solid tumors					
GEN1056 (BNT322)	Co-development Genmab / BioNTech	Solid tumors					

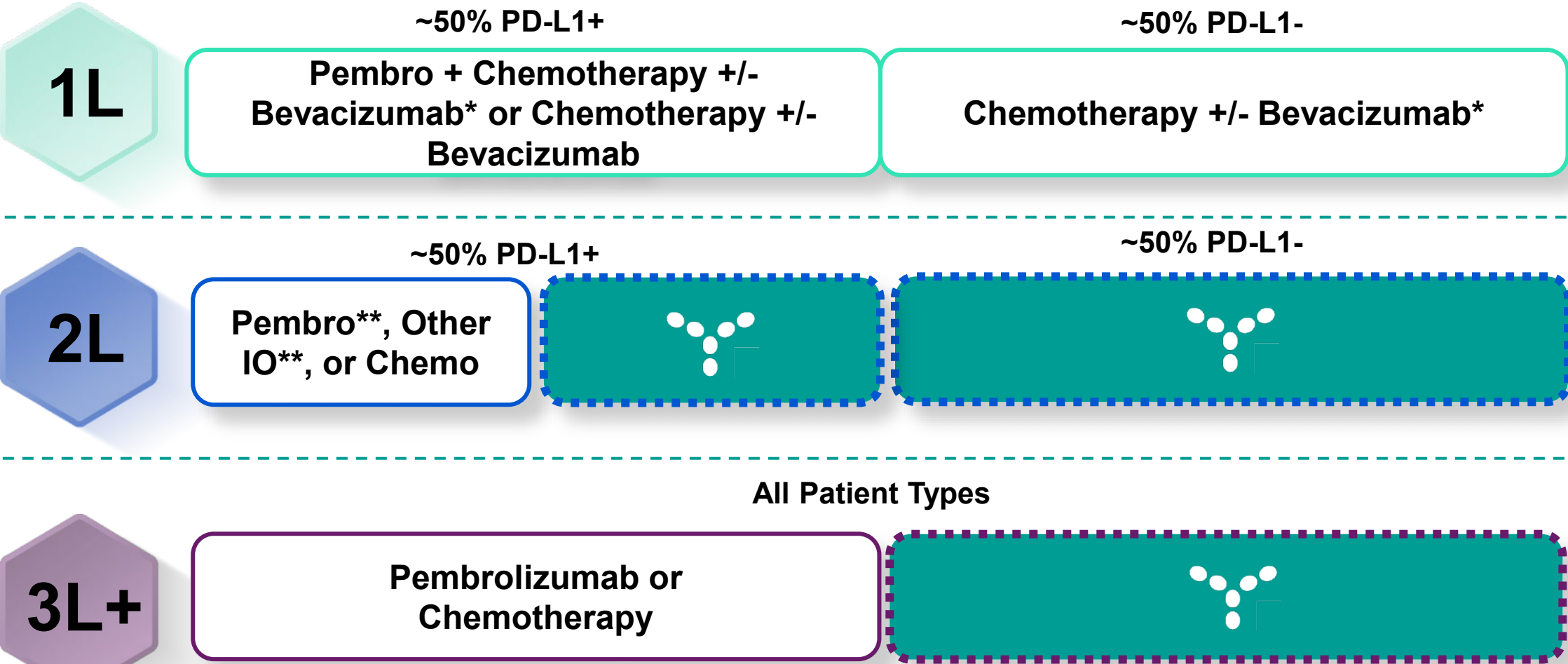


Programs Incorporating Genmab's Innovation and Technology, ≥Phase 2 Development

Product	Technology	Discovered and/or Developed By	Disease Indications	Most Advanced Development Phase				
				Pre-clinical	1	1/2	2	3
Daratumumab	UltiMAb®*	Janssen	Multiple myeloma					
			AL Amyloidosis					
Teprotumumab	UltiMAb	Horizon Therapeutics	Thyroid eye disease					
Amivantamab	DuoBody	Janssen	NSCLC					
			Advanced or metastatic gastric or esophageal cancer					
			Hepatocellular carcinoma					
			Advanced or metastatic colorectal cancer					
Teclistamab	DuoBody	Janssen	Multiple myeloma					
Talquetamab (JNJ-64407564)	DuoBody	Janssen	Relapsed or refractory multiple myeloma					
Inclacumab	UltiMAb	Pfizer (Global Blood Therapeutics)	Vaso-occlusive crises in sickle cell disease					
Mim8	DuoBody	Novo Nordisk	Hemophilia A					
Ordesekimab (PRV-015/AMG 714)	UltiMAb	Provention Bio	Celiac disease					
Lu AF82422	UltiMAb	Lundbeck	Multiple system atrophy					

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

mCC Treatment Landscape



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