

## Meet GSK management R&D focus for the next-wave of pipeline

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A number of adjusted measures are used to report the performance of our business, which are non-IFRS measures. These measures are defined and reconciliations to the nearest IFRS measure are available in the Group's Q3 2024 Results and the Group's Annual Report on Form 20-F for FY 2023.

All expectations, guidance and outlooks regarding future performance and the dividend should be read together with the section "Guidance and outlooks, assumptions and cautionary statements on page 54 of our stock exchange announcement of the Group's Q3 2024 Results, the section "Assumptions and basis of preparation related to 2024 guidance" in the Appendix of this presentation and the statements on page 317 of the Group's Annual Report on Form 20-F for FY 2023.



## Participants

### **Speakers**



**Dr Tony Wood**Chief Scientific Officer

### Q&A



Luke Miels
Chief Commercial Officer



**Dr Hesham Abdullah** SVP, Global Oncology R&D



**Dr Kaivan Khavandi**SVP, Global Respiratory/Immunology R&D

### Next Wave of R&D

Our R&D approach is paving the way for a pipeline of best/first in class medicines and vaccines to deliver growth at scale to 2030 and beyond

Deeper expertise in the science of the immune system



Competitive and differentiated technologies



Network of world-class partnerships and complimentary BD

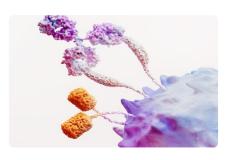
Unique understanding of the role of fibrosis and auto-inflammation

Precision approaches to identify the right target, the right treatment and the right patient

Interventions that support healthy immune system ageing



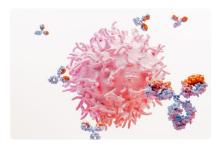
## Our focus for today: Oncology and Respiratory/Immunology



### Oncology

Expand beyond our current focus in haematological and gynaecological cancers...

...with antibody drugconjugates (ADCs) for the treatment of solid tumours.



### Respiratory/Immunology

Build on decades of knowledge in inflammatory mechanisms...

...to lead in COPD<sup>1</sup> and target fibrotic lung, liver and kidney disease.

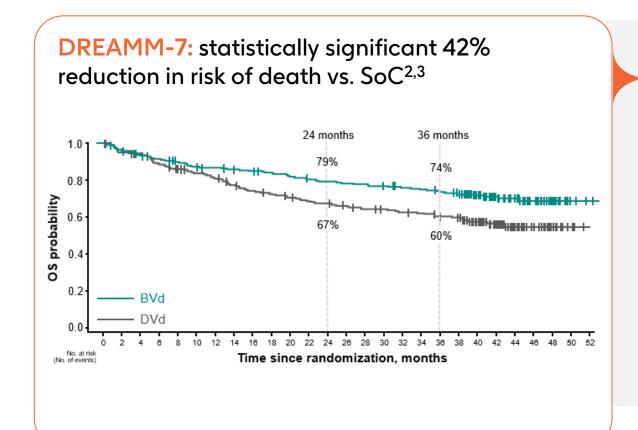




Oncology



# Blenrep could redefine treatment in 2L<sup>1</sup> multiple myeloma with exceptional efficacy, manageable safety profile and advantageous ease of administration



### Transformational patient benefit

Sustained overall survival advantage seen as early as four months

Safety and tolerability consistent with known profile

Eye-related side effects: transient, reversible and manageable with dose modifications and delays

Administration in community setting

Filed in 7 countries; US decision expected July 2025

Median OS<sup>4</sup> was not reached.

Predicted median OS based on modeling was 84 months for BVd and 51 months for DVd



# Promising early results in newly diagnosed patient cohorts increase confidence in *Blenrep* 1L<sup>1</sup> and further lifecycle innovation

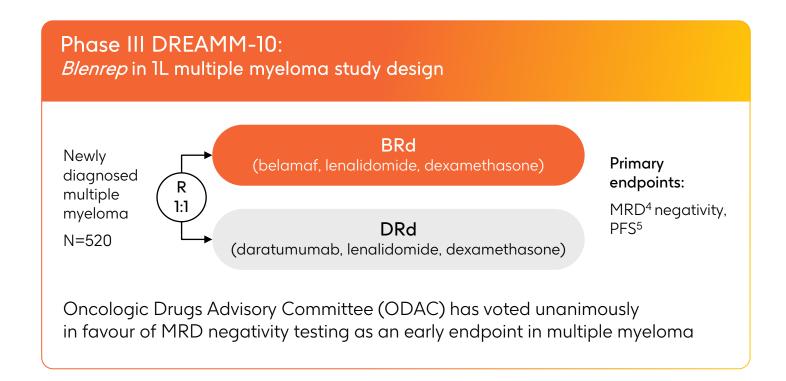
### Phase I/II BelaRd Study<sup>2</sup>

100% response rate in newly diagnosed patients

Rapid, deep, and durable responses across cohorts

No disease progression observed in newly diagnosed patients at 24.8 months median follow up

Actively exploring LCI<sup>3</sup> opportunities in line with competitive developments



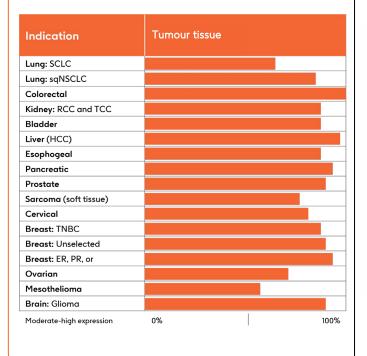
DREAMM-10 to initiate this month with initial results expected H2 2027

1. First line. 2 Data presented at the 5th European Myeloma Network Meeting, April 2024. 3. Lifecycle innovation. 4. Minimal residual disease. 5. Progression free surviv

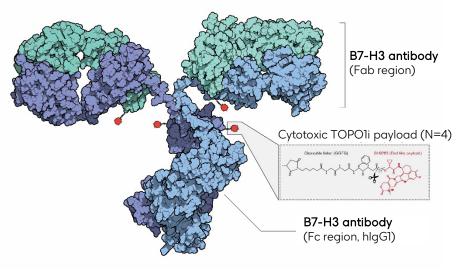


### ADCs targeting B7-H3 provide multi-indication, transformational potential

# B7-H3 is broadly expressed across multiple tumours<sup>1</sup>



# ADC<sup>2</sup> design targets and kills tumour cells, sparing healthy tissue



## Significant emerging opportunity

Development opportunity in genitourinary, lung, gastrointestinal and beyond

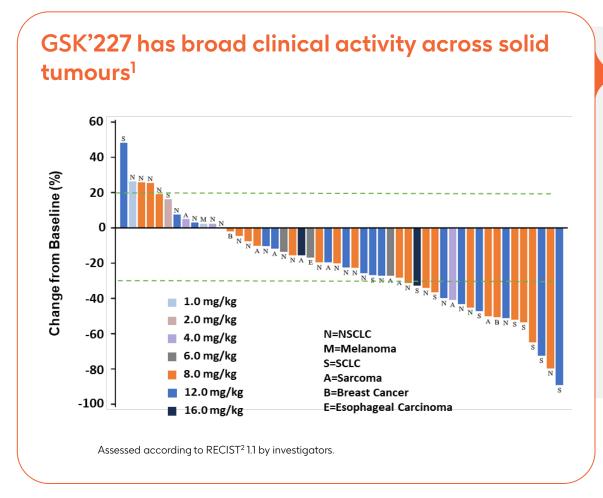
Builds on *Blenrep* progress and CMC<sup>3</sup> capabilities

Complements existing and emerging portfolio



<sup>1.</sup> Tumour tissue = tumour cells or stroma. Modified from Seaman et al. 2017; Lung (SCLC); Carvajal Hausdorf et al. 2019. 2. Antibody drug conjugate. 3. Chemistry, manufacturing and control.

## GSK5764227 (B7-H3 ADC) has broad impact across multiple tumour types



## Promising clinical data across multiple tumour types

GSK'227 showed **anti-tumour responses** in a range of solid tumours

All patients heavily pretreated

Substantial activity even at low doses

Safety profile manageable; side effects in line with those commonly observed in cancer treatment

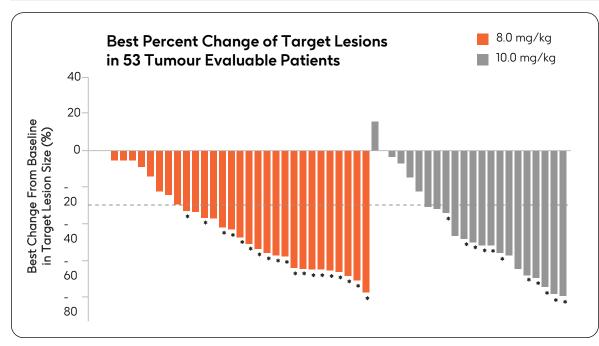
<sup>1.</sup> Wang J, Duan J, Xing L, et al. ARTEMIS-001: Phase 1 study of HS-20093, a B7-H3-targeting antibody-drug conjugate, in patients with advanced solid tumor. J Clin Oncol. 2023;41 (suppl 16):3017. doi:10.1200/JCO.2023.41.16\_suppl.3017). 2. Response Evaluation Criteria in Solid Tumours.

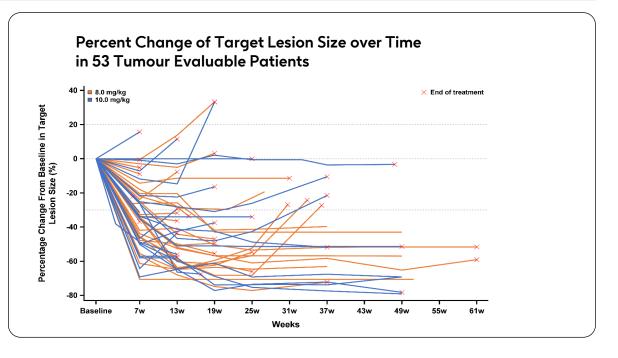


# GSK'227 Breakthrough Designation based on 50-61% overall response rate in extensive-stage small-cell lung cancer<sup>1</sup> and significant need for improved treatments

ES-SCLC SoC has an expected response rate <20%<sup>2</sup>

	8.0 mg/kg (n=31)	10.0 mg/kg (n=22)
ORR <sup>3</sup> , % (95% CI)	61.3 (42.2, 78.2)	50.0 (28.2, 71.8)
DCR <sup>4</sup> , % (95% CI)	80.6 (62.5, 92.5)	95.5 (77.2, 99.9)

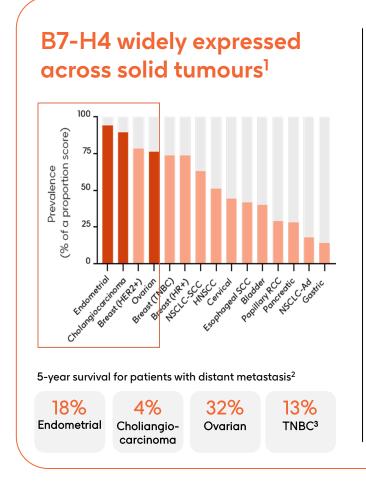


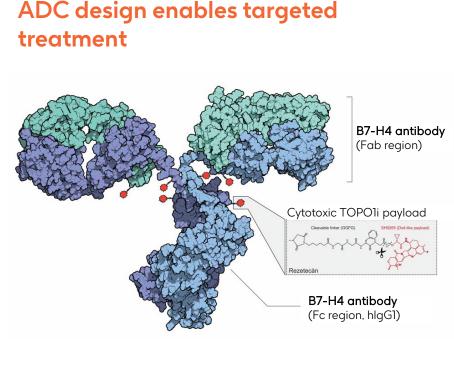


1. ARTEMIS-001 results presented at 2024 World Lung Conference. Data cut-off date: 30 June 2024. 2. Demedts et al. European Respiratory Journal 2009 35(1): 202-215. 3. Objective response rate. 4. Disease control rate



# GSK5733584 (B7-H4 ADC) could redefine survival outcomes in ovarian and endometrial cancer





## Significant emerging opportunity

Highly expressed across multiple tumours, at very low levels in healthy tissue

Emerging clinical profile suggests best-in-class potential

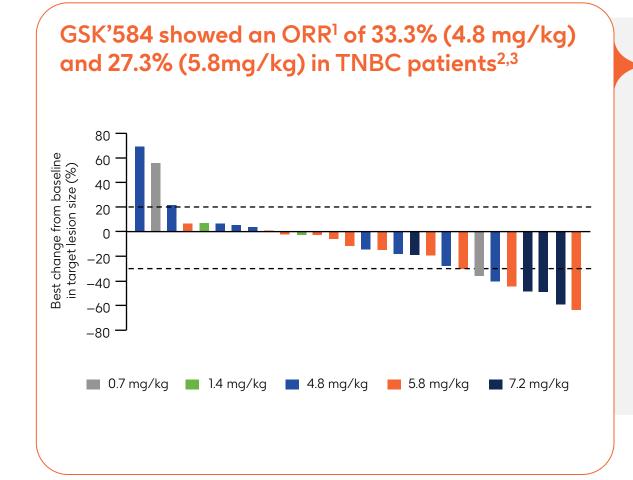
Builds on existing expertise and capability, complementing Zejula and Jemperli

- Tackles platinum & PARPi<sup>4</sup>
  resistance, and HRp<sup>5</sup> tumours in
  ovarian cancer
- Combination with *Jemperli* in EC<sup>6</sup>, replacing chemo

<sup>1.</sup> Kinnear K et al. Clin Cancer Res. 2023;29:1086–101. 2. SEER: 5-year survival statistics for distant metastatic disease in US. 3. Triple negative breast cancer. 4. Poly(ADP-ribose) polymerase inhibitors. 5. Homologous recombination proficient. 6. Endometrial cancer.



### GSK'584 shows promising proof of concept with combination potential



Substantial activity even at low doses and in heavily pretreated patients

Manageable safety profile, side effects in line with those commonly observed in cancer treatment

Exploring activity in other gynaecologic cancers

Development focus on GSK proprietary combinations, including *Jemperli* 

Proof of concept study under way to support future pivotal programme; expect results in H2 2025

1. Overall response rate. 2. Kinneer K, et al. Clin Cancer Res. 2023;29:1086–1101. \*Includes China, Macau, Hong Kong and Taiwan 3. Triple negative breast cancer.



# Accelerating GSK'227 (B7-H3 ADC) and GSK'584 (B7-H4 ADC) development, with first phase III results expected in 2027

### GSK'227 (B7-H3) priorities

Development in lung, CRC<sup>1</sup>, HNSCC<sup>2</sup>, prostate, and other solid tumours

Updated SCLC<sup>3</sup> and osteosarcoma data (Hansoh) at ASCO 2025

GSK global dose-escalation study at ESMO 2025

Pivotal studies start: Q4 2025

Close collaboration with Hansoh, multi-regional trials

### GSK'584 (B7-H4) priorities

Development as monotherapy and in combination across multiple indications in ovarian and endometrial cancers

Data in ovarian and endometrial cancer at ASCO 2025/ ESMO 2025

Dose expansion data anticipated in 2025

External collaborations in **early-stage breast cancer** in 2025

Pivotal studies start: 2026

1. Colorectal cancer. 2. Head and neck squamous cell carcinoma. 3. Small cell lung cancer.



ADCs enable expansion into a range of solid tumours with significant unmet need, strengthening our current portfolio and unlocking new combination potential

	Gynaecologic	Lung	Gl <sup>1</sup>	Head & neck	Breast
Jemperli		$\bigcirc$	$\bigcirc$	$\bigcirc$	
GSK'227 (B7-H3)	-	$\bigcirc$	$\bigcirc$	$\bigcirc$	
GSK'584 (B7-H4)					

ADCs could disrupt conventional treatment regimens, alone and in combination with PD1s<sup>2</sup>, complementing *Jemperli development* and replacing chemotherapy in later lines



<sup>1.</sup> Gastro-intestinal 2. Programmed cell death protein 1.

### With accelerated development, ADCs approvals could come 2027+

### Estimated approval timelines across Immuno-oncology portfolio



MM: multiple myeloma, CRC: colorectal cancer, HNSCC: head and neck squamous cell carcinoma, NSCLC: non-small cell lung cancer. SCLC: small cell lung cancer. H&N: head and neck. Timelines are illustrative.



Respiratory/Immunology



# Deep expertise in inflammatory mechanisms is opening up new opportunities in Respiratory/Immunology

### Today...

**Respiratory leadership** and deep understanding of inflammation

- Nucala (COPD¹)
- Depemokimab (asthma/CRSwNP²)
- Camlipixant (RCC³)

### Foundation in Immunology

Benlysta (lupus/SLE<sup>4</sup>)

#### Next wave...

### COPD portfolio

- New MoAs<sup>5</sup>
- ULA<sup>6</sup> medicines
- BIC<sup>7</sup> combinations

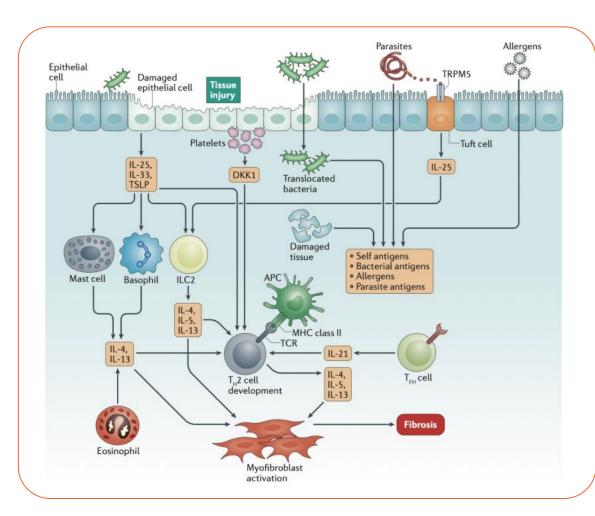
Fibrosis in the lung, liver and kidney

Informed by disease, patient and market insights
Increased confidence due to genetics, phenotyping, single cell data and AI/ML<sup>8</sup>

1. Chronic obstructive pulmonary disease. 2. Chronic rhinosinusitis with nasal polyps. 3. Refractory chronic cough. 4. Systemic lupus erythematosus. 5. Mechanism of action. 6. Ultra-long-acting. 7. Best in class. 8. Artificial intelligence/machine learning.



# We have a deep understanding of the multiple pathways driving inflammation in COPD<sup>1</sup>



### Data-driven, genetically validated development

Pioneers in establishing role of IL-5<sup>2</sup> in driving T2<sup>3</sup> inflammation with *Nucala*, and in long-acting regimens

Advances in understanding of IL-33<sup>4</sup> and TSLP<sup>5</sup> pathways as clinically validated targets for COPD

A range of modalities is needed to identify the best possible approach for COPD patients

- >300 million people affected globally<sup>6</sup>

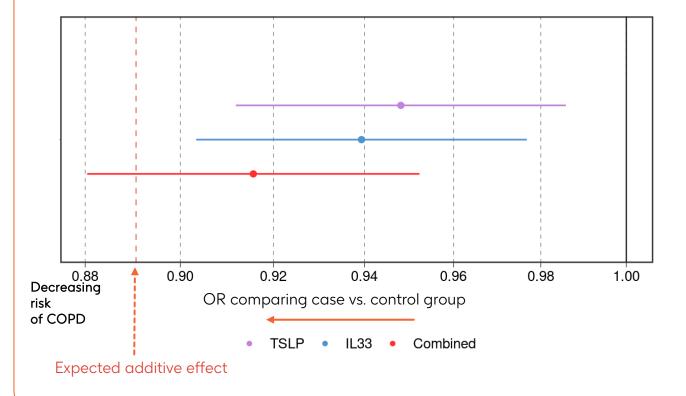
Long-acting combination potential for additive efficacy benefit, reducing exacerbations and keeping people out of hospital

1. Image source: Nature, January 2018. Volume 18. 2. Interleukin-5. 3. Type 2. 4. Interleukin-33. 5. Thymic stromal lymphopoietin. 6. Ruvna L, Sood, A; Clin Chest Med. 2020 Sep;41(3):315-327.



### IL-33 and TSLP have strong genetic validation as potential targets in COPD

## Odds of COPD are lower in people with genetically reduced IL-33 and TSLP activity (OR, 95% CI)<sup>1</sup>



Lower IL-33 and TSLP genetic activity is associated with reduced risk of COPD

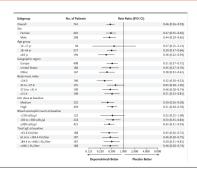
Genetically reduced activity of both TSLP and IL-33 consistent with additive effect

Supports differentiated COPD development approach:

 Targeting multiple pathways to reach broadest group of patients and deliver increased efficacy

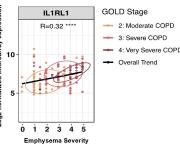


# Insights from unique, proprietary data sets support the need for multiple modalities to ensure the right treatment for the right patient



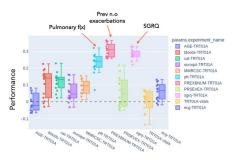
## Extensive clinical trial data for subgroup insights:

- Precision medicine
- Interactions with different measures of efficacy of EOS, FEVI, symptom burden



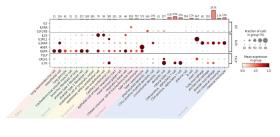
## Plasma and airway omic analyses for translational insights

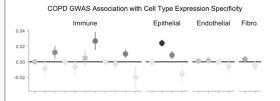
- MoA vs. endotype
- Genetically instrumented combination predictions



## AI/ML tools for disease progression models

 Interpret multi-modal data to build disease progression models

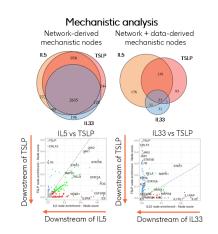




### Single cell transcriptomics shows differentiated mRNA expression profiles across lung cell types

- IL5 axis: epithelial cells
- IL33 axis: endothelial cells and mast cells
- TSLP axis: dendritic cells

Integration with genetics identifies causal cell types

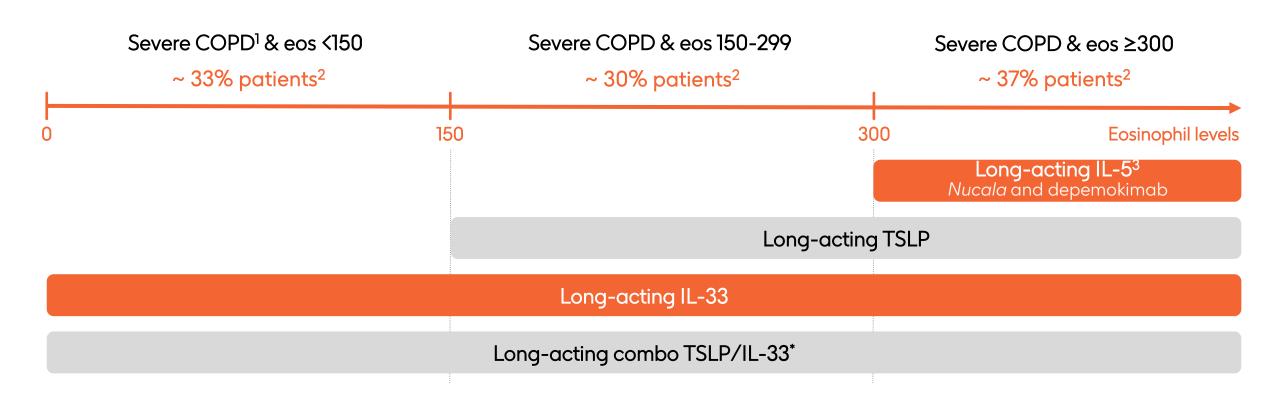


Gene expression mechanistic modelling supports opportunity for multiple modalities, complementary to genetic analyses

- IL5 and TSLP share downstream signaling cascade
- IL33 uses a distinct cascade



# We will expand our COPD leadership exploring a suite of ultra-long-acting medicines to maximise efficacy in the broadest range of patients



Slide updated to reflect new COPD data 19 Feb 2025 1. Severe COPD defined as  $\geq$  2 exacerbations in past 12 months. 2. GSK custom analysis: Mar 2023. A retrospective cross-sectional analysis of Optum enrollees with  $\geq$ 1 medical diagnostic claim for COPD in any position,  $\geq$ 40 years of age, continuous enrollment between 01 July 2021 and 30 June 2022, and  $\geq$ 1 dispensing of any maintenance therapy. 3. Includes Nucala and dependentian.



# Ultra-long-acting treatments have the potential to significantly impact outcomes in COPD

#### Need for improved treatment options

>40% COPD patients experience exacerbations on triple therapy<sup>1</sup>

**<50%** 5-year survival after being hospitalised with COPD exacerbation<sup>2</sup>

**<50%** compliance with inhaled therapy<sup>3</sup>

33% persistence to biologic therapy<sup>4</sup>

#### Benefits of ULA medicines

Sustained suppression of inflammation to prevent disease progression

New efficacy benchmarks: exacerbation/hospitalisation reduction

Combination potential for broader patient coverage

Adherence and patient convenience

1. Lahousse L, et al. Eur Respir J 2017;50(2):1602470. 2. Sánta B, et al. Pulmonology 2023;29:284–91. 3. Turégano-YedroInt M, et al. J Chron Obstruct Pulmon Dis. 2023 Dec 4;18:2887–2893. 4. GSK data on file: US Claims Data, Compliance & Persistency Dashboard. New-to-Brand. 12M persistency.



# We are well placed to execute new COPD programmes across IL-5, IL-33 and TSLP with phase III starts from 2025 onwards

Multiple data read outs and regulatory filings

	2024	2025	2026	2027	2028	2029+
Nucala COPD	MATINEE phIII read out	US approval				
Depemokimab COPD		Phase I	II			
LA IL-33	Phase I (a/b)			Phase III		
LA TSLP		Phase II (a	asthma)	Phase III		
IL-33/TSLP combo*			Phase II I	POC Phase III		



# Our expertise in inflammatory pathways and fibrosis is unlocking new opportunities beyond the lung, for example in liver disease

Steatotic Liver Disease: affects ~5% of general population; major global cause of cirrhosis with significant unmet need

Alcohol

### Metabolic Syndrome

#### Metabolic dysfunction-associated steatohepatitis (MASH)

3-5% global prevalence<sup>2</sup>

<10%

patients diagnosed<sup>3</sup>

#2

74%

cause of liver transplant in the US<sup>4</sup>

of US general population

overweight/obese<sup>5</sup>

Sub-optimal current standard of care

#### Alcohol-related liver disease (ALD)

~26 million

#

cases of advanced ALD globally<sup>1</sup>

cause of liver transplant in the US<sup>4</sup>

### 60%

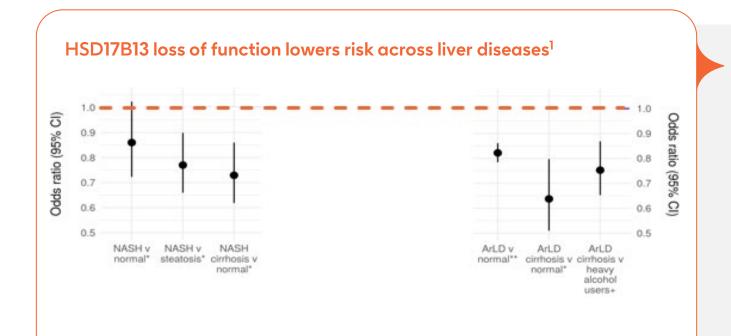
of US general population actively drink alcohol and 10% have alcohol dependency<sup>6</sup>

## No pharmacological treatment

options available

<sup>1.</sup> Global Burden of Disease Study 2017 Cirrhosis collaborators. 2020. 2. Miao et al. Trends in Endocrinology & Metabolism, August 2024, Vol. 35, No. 8. 3. Allen et al. Postgraduate Medicine. 2024, Vol 136, No. 3, 229–245. 4. Younossi et al. Hepatol Commun. 2023 Dec 22;8(1):e0352. 5. CDC. Prevalence of Overweight, Obesity, and Severe Obesity Among Adults Ages 20 and Older: United States, 1960-1962 Through 2017-2018. 6. National Institute on Alcohol Abuse and Alcoholism. September 2024.

### HSD17B13 has strong genetic validation as a target in SLD



Naturally occurring variants in HSD17B13 are protective against both alcohol and non-alcohol related liver disease

~30-50% risk reduction vs. non carriers<sup>2</sup>

Protective effect is maintained and potentially enhanced despite continued alcohol consumption,

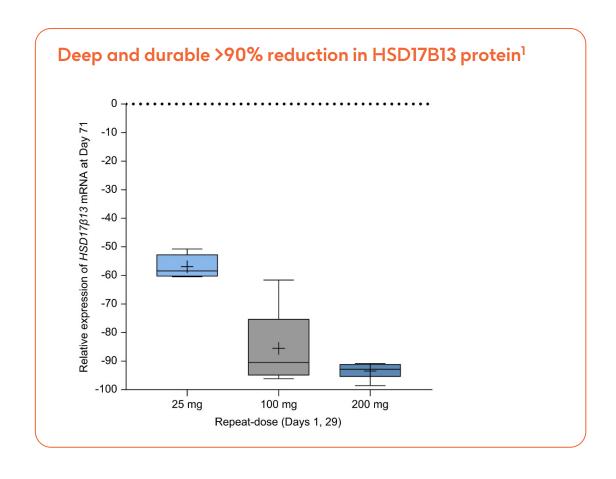
 Suggests potential for efficacy in those at highest risk<sup>3</sup>

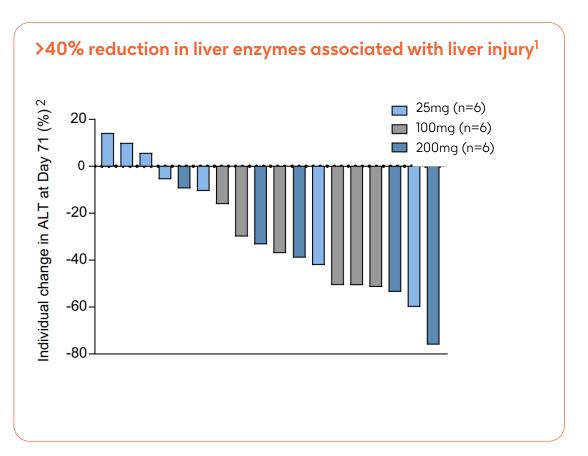
1. \*Abul-Husn 2018 (PMID 29562163); \*\* Abul-Husn 2018 (PMID 29562163) & FinnGen & UK Biobank; + Innes 2020 minus UK Biobank (PMID 32561361). 2. Motomura et al. J Pers Med. 2021 Jun 30;11(7):619. 3. Gellert-Kristensen 2019 (PMID 31155741).

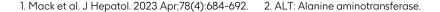




# GSK'990 showed deep and durable reduction in HSD17B13 expression and reductions in key marker of liver injury









### Tech-enabled GSK'990 development programme underway across spectrum of SLD

siRNA<sup>1</sup> modality could reach previously inaccessible targets

### Tech-enabled SLD programme

Genetically validated targets

Single cell sequencing, imaging and patient endophenotyping

Biomarker driven to identify right patients and predict treatment outcomes

Non-invasive tests with excellent predictive value for clinical outcomes to avoid liver biopsy

Oligonucleotide platform

	Steato	otic liver disease	(SLD)	
NASH/MASH <sup>2</sup>		MetALD <sup>3</sup>		ALD <sup>4</sup>
Phase IIb HORIZON	study	Pho	ıse II STARL	IGHT study

1. Small interfering RNA. 2. Nonalcoholic steatohepatitis/Metabolic dysfunction-associated steatohepatitis. 3. Metabolic alcohol-related liver disease. 4. Alcohol related liver disease.



# Opportunity to develop an SLD<sup>1</sup> portfolio of complementary mechanisms to reach a broad group of patients

Two genetically validated targets which complement GSK'990 + oligonucleotide tools against each target to clear fat from liver cellsidentified by Wave collaboration...

#### Target #1

## Differentiated biology Target regulates toxic saturated fat storage in liver

cells

# Genetic association Associated with risk of MASLD<sup>2</sup>, MASH<sup>3</sup>, ALD<sup>4</sup>, liver damage, liver fat and cirrhosis

#### Target #2

## Differentiated biology Target promotes accumulation and synthesis of lipid droplets

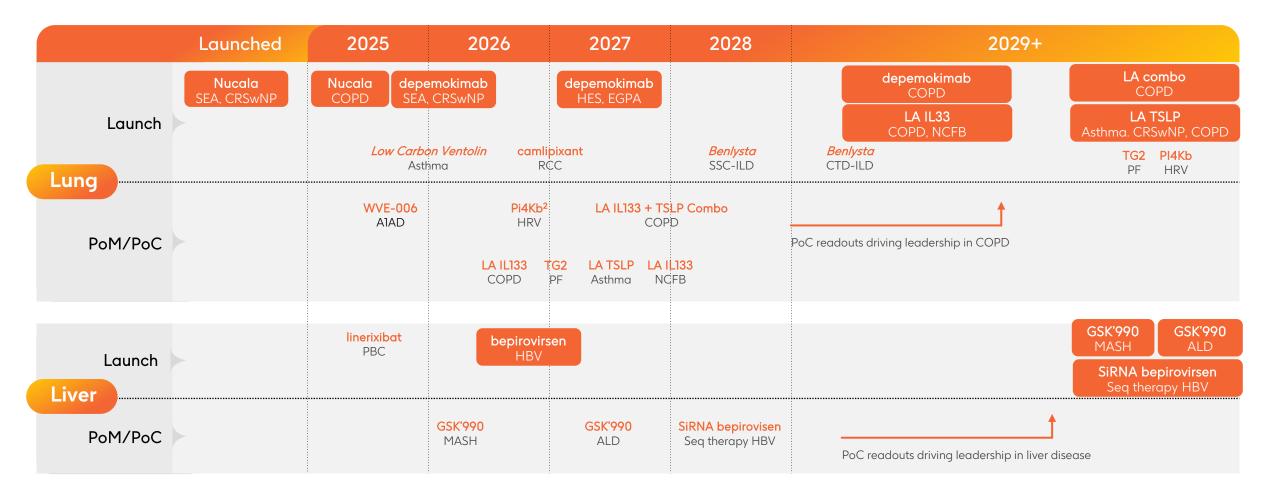
# Genetic association Associated with risk of MASH, MASLD, elevated liver enzymes and cirrhosis

could expand our patient reach with GSK'990 in mono or combo therapies					
	HSD17B13 (GSK'990)	Target 1/2 siRNA	Target 1/2 siRNA + GSK'990		
MASH resolution (% of patients)			W. W. W.		
Fibrosis improvement (% of patients)			<i>"\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>		



## Over the next decade, we expect significant approvals in Respiratory and Immunology

Focused in new areas, built on our deep expertise and enabled by tech



SEA: severe eosinophilic asthma. CRSwNP: chronic rhinosinusitis with nasal polyps. COPD: chronic obstructive pulmonary disease. HES: hypereosinophilic syndrome. EGPA: Eosinophilic granulomatosis with polyangiitis. PF: pulmonary fibrosis. RCC: refractory chronic cough. SSC-ILD: systemic sclerosis-interstitial lung disease. CTD-ILD: connective tissue disease-interstitial lung disease. NCFB: Non-cystic fibrosis bronchiectasis. HRV: human rhinovirus. A1AD: alpha-1 antitrypsin deficiency. MASH: Metabolic dysfunction-associated steatohepatitis. ALD: alcohol related liver disease. HBV: hepatitis B virus. SLD: steatotic liver disease. Timelines are illustrative.



### Key takeaways

- Strong progress in R&D with 67 pipeline assets including 18 in Phase III
- Prioritising investment to accelerate new, high-potential development opportunities in:
  - Oncology, expanding beyond haematological and gynaecological cancers using ADCs for the treatment of solid tumours
  - Respiratory and Immunology, building on decades of knowledge in inflammatory mechanisms to target fibrotic lung, liver and kidney disease
- Examples of differentiated next-wave pipeline to deliver long-term growth
- Multiple data and regulatory catalysts to come and 5 approvals expected in 2025

