Patrick Vallance

President, Pharmaceuticals R&D

GSK R&D: what is important to us

Innovative science

- Average of 35 publications annually in worlds-class journals (Nature, Cell, Science)
- In 2014 and 2015 to date, GSK scientists listed as co-authors in more than 1,600 publications
- 80% of pre-clinical to Phase II assets have a novel mechanism of action
- Target sciences initiative with EBI/Sanger & Altius Institute in Seattle

Patient need

- 5 *Breakthrough Designations* since 2013
- 3 FDA *Priority Reviews* since 2010
- Focus on preventative and curative medicines
- Strong focus on patient input
- Quality of life study endpoints

Quality

GSK achieved highest number of FDA approvals, 2010-15 **14**

- All first cycle approvals since 2012
- 10% faster in time to file approval than industry average
- Clinical study cycle times 20% faster than average
- Cost per patient visit 30% less than 2008
- Molecule quality focus

Partnership

Collaborations with academia, biotechs, pharmaceutical companies and regulators

Recruiting and developing the best scientists

We're committed to ensuring GSK remains the best place to develop medicines

World-class leaders

External talent sourcing

Biotech

Industry

Academia

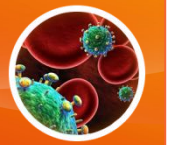
Scientific career pathways

Expert advisory networks

HIV / Infectious Diseases

Infectious disease burden continues to grow and present public health challenges

HIV



- 36.9m living with HIV worldwide; 1.2m deaths & 2m new infections annually[1]
- Resistance, adherence and addressing long-term toxicities remain areas of significant unmet medical need
- The ultimate goal is remission and cure

HBV

- Globally, 240m people have Chronic Hepatitis B[1]
- More than 780k people die each year
- HBV evades immune system, with limited options for durable remission

HCV

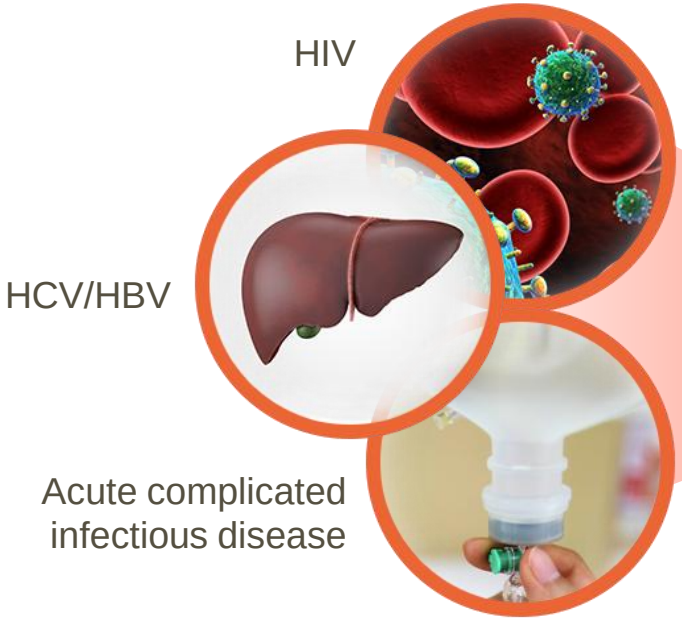
- Globally, 130-150m people have Chronic Hepatitis C[1]
- 350-500k people die each year
- Need for a cure completed in a single visit

Acute complicated infectious diseases

- Globally, ~3.5m annual deaths due to lower respiratory tract infections[2]
- Increasing antimicrobial drug resistance (MDR)
- Hospitalised infections & complications have direct costs >$35bn annually in US[3]
- Pathophysiology & tissue damage suggest aberrant host immune responses as key driver

[1] WHO 2015; [2] WHO 2014; [3] J Med Econ 2013

Infectious Diseases strategy: from innovative treatment regimens to the pursuit of cure



GSK Pipeline

- Innovative Treatment Regimens
- Long-acting Treatment
- Prevention
- Remission & Cure

Dolutegravir set to be at the heart of future treatment regimens

Dolutegravir profile

Efficacy

- Rapid and sustained viral load drop

Barrier to Resistance

- No resistance mutations selected in first line failures (one patient had E157Q/P mutation without decreased susceptibility to dolutegravir)
- Limited resistance mutation evolution in experienced patients on failure
- Distinct resistance profile compared to other INIs (RAL, EVG)

Favorable PK Profile

- Booster free
- No food requirement for adequate exposure

Well tolerated

DTG/3TC: Planned launch H1 2019

2-drug STR for HIV treatment in naïve and suppressed patients, QD
Simplification - Potential benefit on tolerability and drug burden
No food requirements

DTG/RPV: Planned launch H1 2018

2-drug STR for HIV treatment in suppressed patients, QD
Simplification - Potential benefit on tolerability and drug burden
(ViiV Healthcare - Janssen sponsored)

Triumeq™ (abacavir/dolutegravir/lamivudine): Launched **2014**

3-drug STR for HIV treatment, QD
Only currently available DTG containing Single Tablet Regimen (STR)

Tivicay™ (dolutegravir): Launched **2013**

For HIV treatment in combination with other ART, QD

Approved Investigational

ViiV Healthcare is a specialist joint venture solely dedicated to HIV, owned by GSK, Pfizer and Shionogi

PADDLE (Pilot Antiretroviral Design with Dolutegravir and LamivudinE): Investigator sponsored study design

- Investigator sponsored study
- 2 tablet treatment
- ARV naive patients
- 2 cohort study
- Open label single arm

Phase IV, pilot, open-label, single arm exploratory trial

1st cohort (n= 10)

DTG 50 mg QD
LMV 300 mg QD

2nd cohort (n= 10)

DTG 50 mg QD
LMV 300 mg QD

Patient #	Base line viral load	Week 8	Week 24
1	10.909	< 50	< 50
2	10.233	< 50	< 50
3	151.569	< 50	< 50
4	148.370	< 50	< 50
5	20.544	< 50	< 50
6	14.499	< 50	< 50
7	18.597	< 50	< 50
8	24.368	< 50	< 50
9	10.832	< 50	< 50
10	7.978	< 50	< 50
11	273.676	< 50	< 50
12	64.103	< 50	< 50
13	33.829	< 50	< 50
14	15.151	< 50	< 50
15	23.500	< 50	< 50
16	3.910	< 50	< 50
17	25.828	< 50	< 50
18	73.069	< 50	< 50
19	106.320	< 50	< 50
20	7.368	< 50	< 50

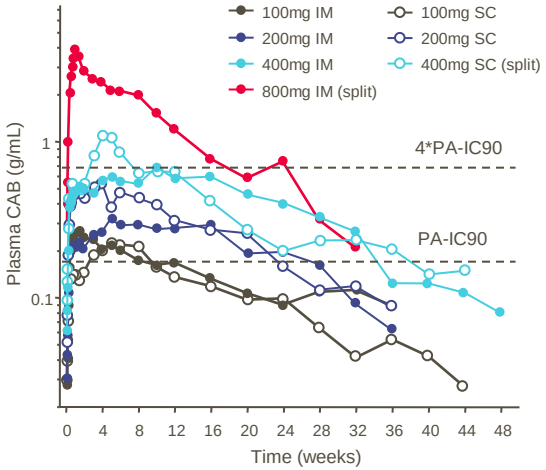
From week 8 onwards all patients VL was undetectable (pVL < 50 copies/mL)

Adapted from Cahn *et al*, EACS 2015, LBPS4/1

Cabotegravir: Long-acting antiretroviral

Long-acting

Mean concentration/time profile following single injection[1]



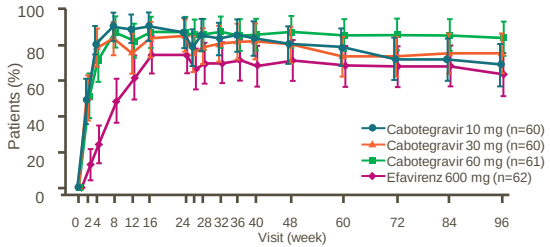
[1]Spreen *et al*, JAIDS 2014;67(5):481-486

HIV Treatment

THE LANCET Infectious Diseases

LATTE Week 96 Results[2]

Cabotegravir plus rilpivirine, once a day, after induction with cabotegravir plus nucleoside reverse transcriptase inhibitors in antiretroviral-naive adults with HIV-1 infection (LATTE): a randomised, phase 2b, dose-ranging trial

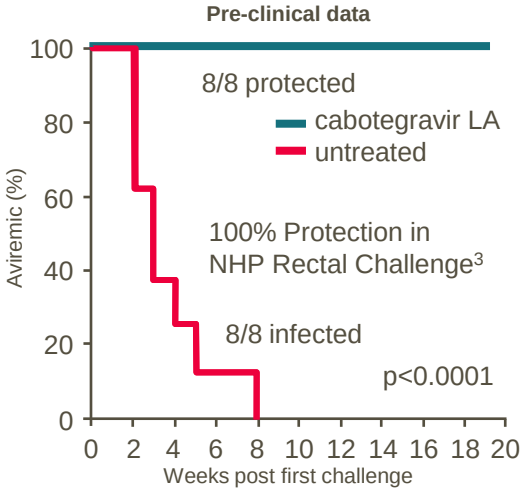


Proportion of patients with HIV-1 RNA concentration of less than 50 copies per mL by visit in the intention to-treat exposed population
Error bars indicate 95% CI

[2]Margolis *et al*, Lancet Inf Dis 2015;15(10):1145-1155

HIV Prevention

Sciencexpress



[3]Andrews *et al*, Science 2014;343(6175):1151-4

Cabotegravir long-acting clinical studies

Potential for better adherence

HIV TREATMENT

CAB LA + RPV LA

Planned launch: 2019/2020

4Q2015 LATTE 2 results

Key Phase III-enabling data: combination CAB LA + RPV LA as maintenance therapy (ViiV Healthcare - Janssen sponsored)

Mid-2016 HIV Treatment Phase III start

CAB LA + RPV LA switch studies (transition from oral therapy to long-acting)

HIV PREVENTION

CAB LA monotherapy

Planned launch: 2020+

Mid-2016 PrEP Phase III start (men)

CAB LA monotherapy vs. TDF/FTC (Truvada) in at-risk men who have sex with men/transgender women
(Collaboration with third party being considered)

End-2016 PrEP Phase III start (women)

CAB LA monotherapy vs comparator in at-risk women
(Collaboration with third party being considered)

LATTE 2 - cabotegravir LA + rilpivirine LA for treatment of HIV

Headline data – path to Phase III

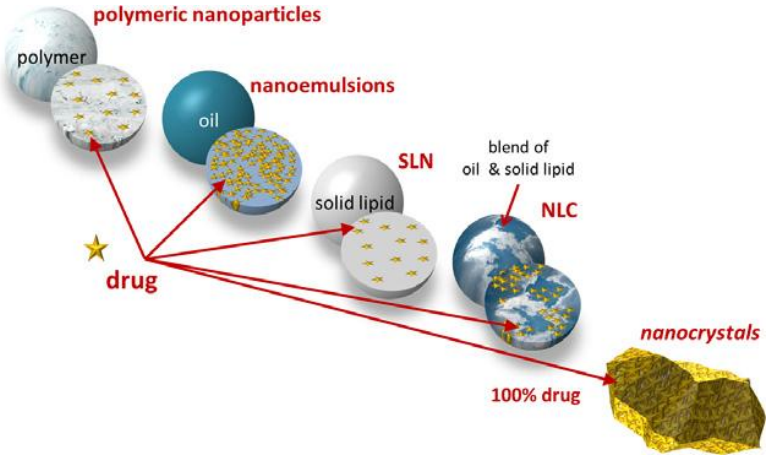
- Phase IIb trial examining long-acting (LA) cabotegravir (CAB) in combination with LA rilpivirine (RPV). 309 treatment naïve subjects initially treated with QD oral CAB 30mg + 2 NRTIs
- Following virologic suppression 286 subjects qualified for entry into maintenance phase and were randomised 2:2:1 onto: 4 week injections with CAB LA + RPV LA (Q4W); 8 week injections with CAB LA + RPV LA (Q8W) or continuation of oral CAB + NRTIs
- Through 32 weeks on 2-drug maintenance therapy with CAB LA and RPV LA, 95% (Q8W) and 94% (Q4W) of subjects were virologic successes (VL<50) compared to 91% of subjects continuing three drug oral CAB + NRTIs
- Adverse events (AEs) leading to withdrawal were 5% (n=6) for Q4W, 2% (n=2) for Q8W, and 2% (n=1) for oral CAB + NRTIs. The most common AE was injection site pain (93% of injection recipients)
- Detailed analyses just starting

Next wave cabotegravir long-acting combinations

Opportunities with broadly neutralising antibodies

- Cabotegravir long-acting
- Every 2 or 3 months

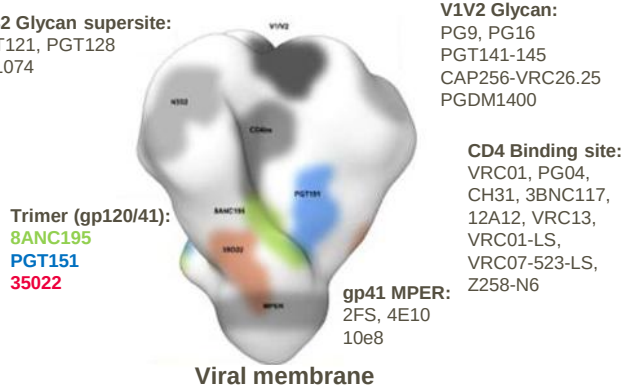
Nano-formulation



+

- Broadly neutralising antibodies (bnAbs)
- GSK and the National Institute of Allergy and Infectious Diseases/National Institutes of Health collaboration to be announced later this week

Potential targets for neutralisation

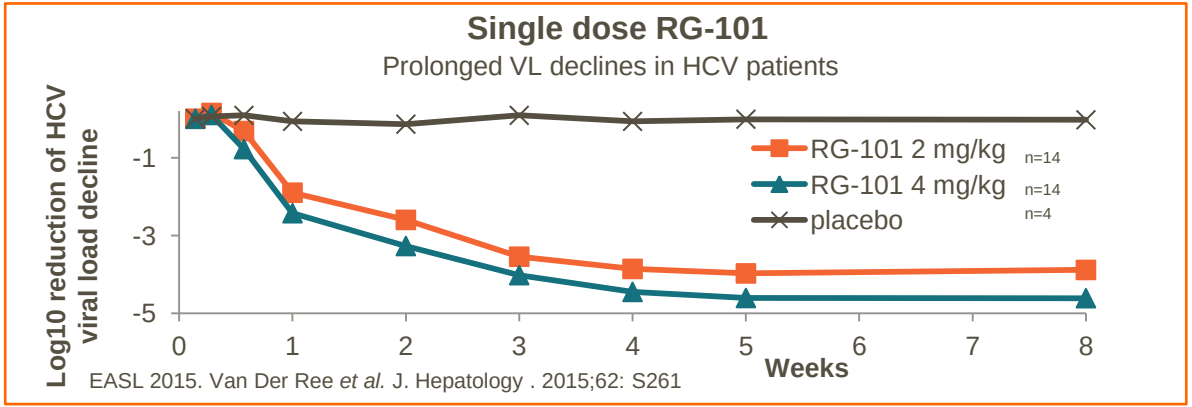


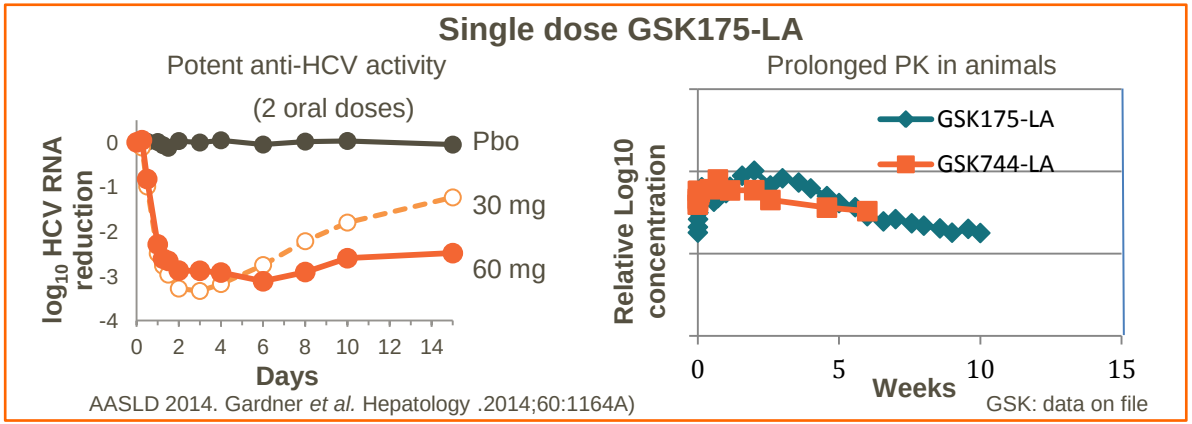
Huang *et al*. Nature 2014;515(7525):138-42

A pilot clinical combination study of VRC01 and cabotegravir is planned for 2016 start

GSK & Regulus combination offers potential for a single administration treatment for HCV

- RG101 lowers viral load
- GSK2878175 lowers viral load
- Both molecules have potential for prolonged PK/PD activity
- Prolonged pan-genotype and anti-HCV activity
- Potential single administration option
- Clinical combination study starts 2016

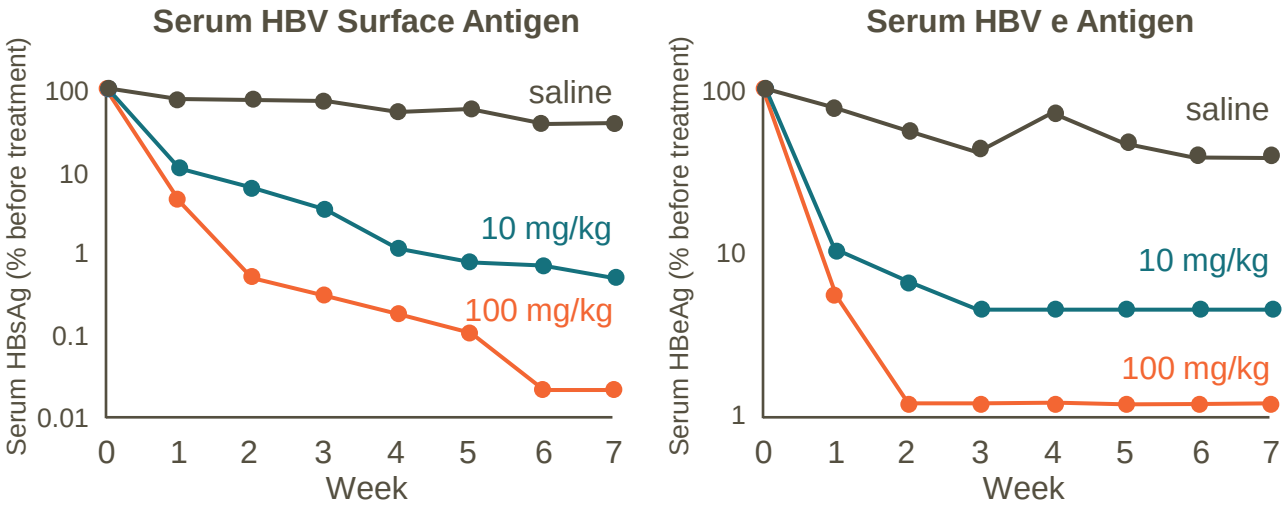




GSK & Isis collaboration targeting next generation of HBV medicines: functional cure

- Antisense approach taken to knock down immune suppressive antigens
- Entered collaboration with Isis Pharmaceuticals in 2010
  - GSK contributed target, Isis provided platform & discovery
- Lead compound GSK3228836
  - Phase II start planned 2016

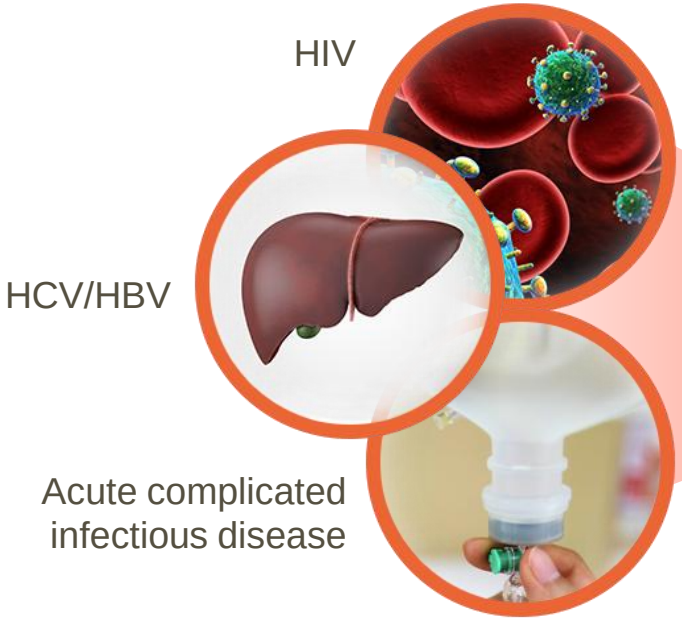
Reduction of HBV antigen by anti-HBV ASO in mice



GSK, data on file.

Note: GSK3228836 subject to exercise of option by GSK

Infectious Diseases strategy: from innovative treatment regimens to the pursuit of cure



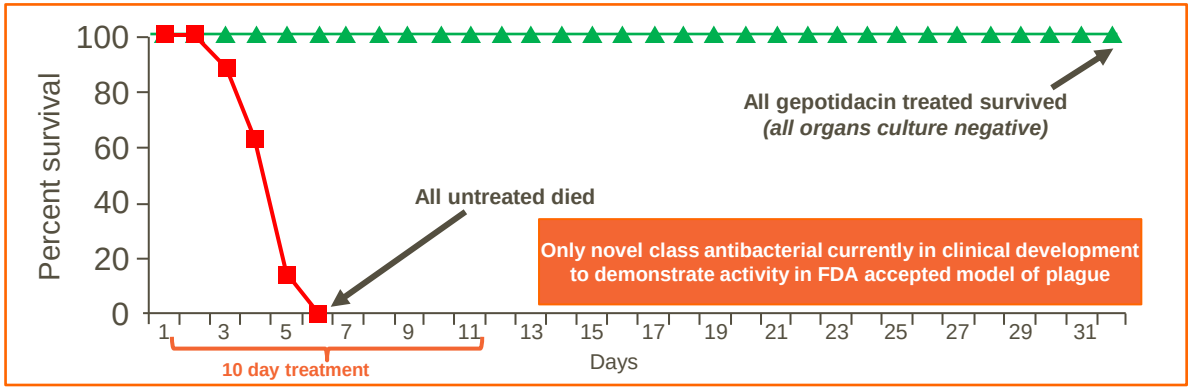
GSK Pipeline

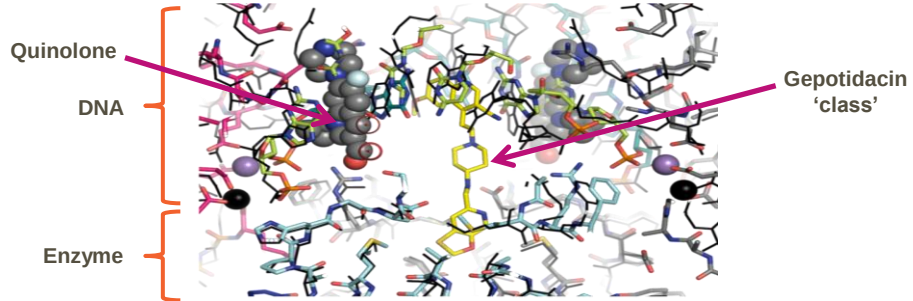
- Innovative Treatment Regimens
- Long-acting Treatment
- Prevention
- Remission & Cure

First in a new class of antibacterials: gepotidacin (GSK2140944) – a topoisomerase inhibitor

- Novel mechanism with bactericidal activity against MDR pathogens
- Promising safety & efficacy profiles in Phase II studies
- Effective against key resistant strains:
  - MDR MRSA, MDR E.*coli* & Drug resistant N.*gonorrhoeae*
- Potential to address multiple conventional & bio-threat indications
- Progressed via successful partnerships with BARDA & DTRA

Planned Filing: 2019 for resistant infections. Discussions with FDA on plague indication.





Gepotidacin binds to a novel site on gryase

Nature Struc Mol Biol, 2010,17;465

MDR: multi-drug resistant; DTRA: Defense Threat Reduction Agency (US DoD); BARDA: Biomedical Advanced Research & Development Authority (US HHS)

Infectious Diseases strategy: from innovative regimens to treatment and the pursuit of cure

- dolutegravir based regimens
- cabotegravir LA
- cabotegravir LA + rilpivirine LA
- Next generation agents and combinations

- HCV
- HBV

- gepotidacin
- tafenoquine
- i.v. danirixin

GSK Pipeline

Innovative Treatment Regimens

HIV, HCV, HBV

Long-acting Treatment

HIV, HCV, HBV

Prevention

HIV

Remission & Cure

HIV, HCV, HBV (Qura)

Respiratory

Respiratory diseases: still significant unmet need

Asthma

- Globally 242m people have asthma (32% increase since 1990)
- Gold-standard options delivered for mild/moderate asthma
- Major unmet medical need in severe asthma
  - **5-10% of asthma patients**
  - **60% of cost burden**
- Immune modulation offers potential for better disease control and even remission

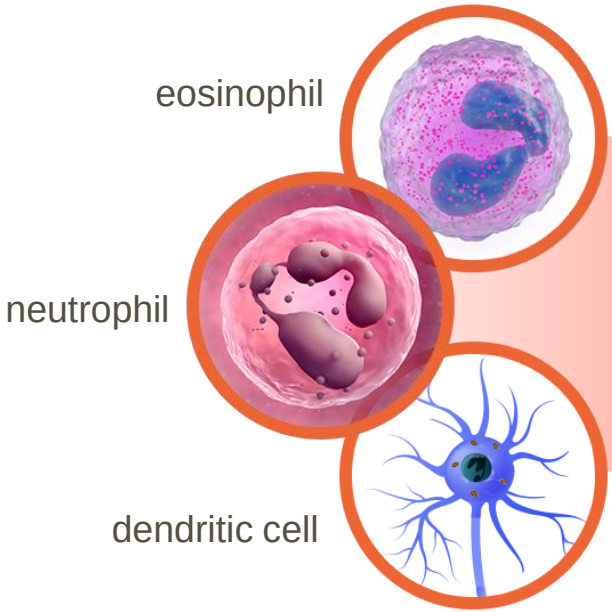
COPD

- 329m people worldwide have COPD
- 3rd leading cause of death by 2030
- Longitudinal studies (e.g. ECLIPSE) helping to identify prognostic biomarkers (e.g. fibrinogen)
- Targeting underlying drivers of disease progression is key

Lung Fibrosis & Acute Lung Injury

- Each affects ~5m patients worldwide
- Idiopathic Pulmonary Fibrosis (IPF): median survival of just 2-5 years, 2 IPF products approved
- Urgent need to improve symptoms and delay disease progression
- Acute Lung Injury (ALI): hospital mortality rates of up to 50%
- Need to identify better clinical path for drug development

Asthma R&D strategy: from secondary prevention to primary disease modification



GSK Pipeline

- Targeted Biologicals
- Extended Duration Biologicals
- Once Daily Inhaled
- Remission-inducing

Nucala™* (mepolizumab) demonstrates significant reduction in exacerbations

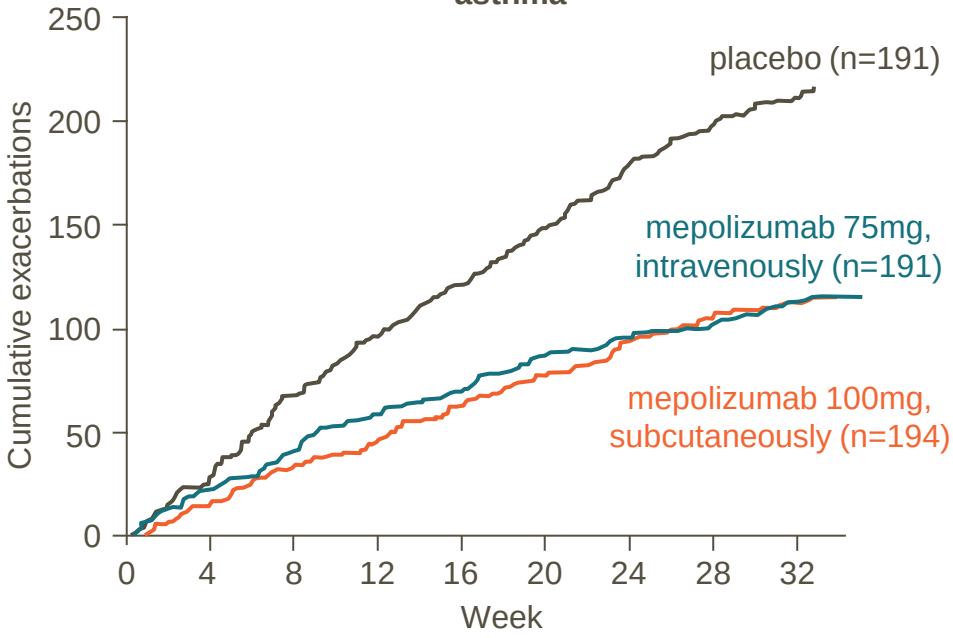
Nucala (subcutaneous anti-IL-5 mAb):

- Straightforward patient selection & biomarker
- 53% reduction in exacerbations
- 61% reduction in ER visits/ hospitalisations
- Improvement in health status by 7 points (SGRQ)
- Significant reduction in daily oral corticosteroid dose while maintaining control seen in trials
- Dosing every 4 weeks, no weight adjustment required
- Well tolerated

Indication:	Severe refractory eosinophilic asthma
Positive CHMP:	24 Sep 2015
PDUFA :	4 Nov 2015

*The name Nucala is not approved for use by the FDA or EMA.

mepolizumab (s.c. or i.v.) reduced the number of asthma exacerbations in patients with severe eosinophilic asthma



Adapted from MENSA study, Ortega *et al*. NEJM 2014; 371:1198-207

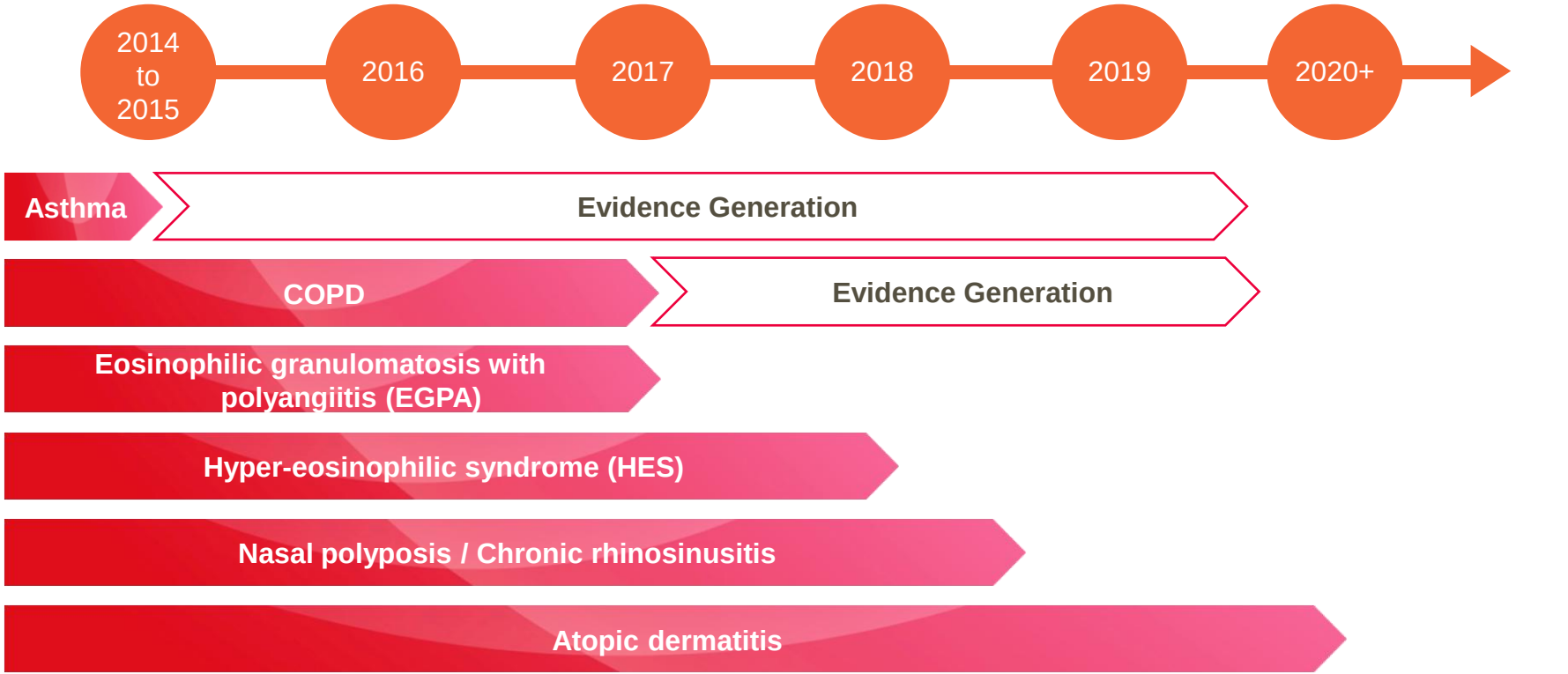
Nucala will be first in class with a strong profile

	Nucala	XOLAIR *Novartis/ Genentech*	reslizumab *Teva*	benralizumab *AstraZeneca*	lebrikizumab *Roche*	tralokinumab *AstraZeneca*	dupilumab *Sanofi/ Regeneron*
Phase	Submitted	Launched	Submitted	Ph III ongoing	Ph III ongoing	Ph III ongoing	Ph III ongoing
Earliest launch assumption*	Q4 2015	Launched	Q4 2015/ Q1 2016	2017	2017	2019	2019
Mechanism	Anti-IL-5	Anti-IgE	Anti-IL-5	Anti-IL-5R	Anti-IL-13	Anti-IL-13	Anti-IL-4Rα
Delivery mechanism	SC	SC	IV	SC	SC	SC	SC
Efficacy data Ph III	✓	✓	✓	Phase III ongoing			
Safety data Ph III	✓	✓	✓				

*Based on published filing date plus average review times

Nucala* has potential in other indications

Anticipated file timelines



*The name Nucala is not approved for use by the FDA or EMA and may not be approved for additional indications.

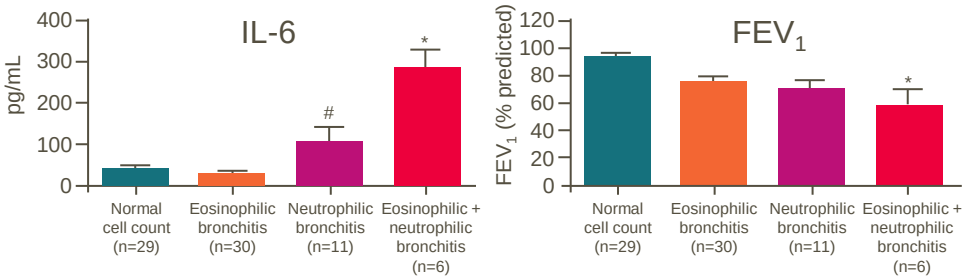
Two novel biologicals

Targeted approaches for uncontrolled asthma patients

sirukumab* (IL-6 mAb): Non-Th2 asthma

- Targets severe disease ineligible for Th2/eosinophilic directed mAbs (40% of severe asthma patients)
- IL-6: key inflammatory driver and genetic association of this pathway in asthma
- Expected to improve symptoms and exacerbations
- Phase II study start in 2016

Elevated IL-6 associated with eosinophilic-neutrophilic inflammation and decreased pulmonary function (FEV_1) in asthma patients



*p < 0.05 vs neutrophilic bronchitis and eosinophilic bronchitis groups
#p < 0.05 vs eosinophilic bronchitis group

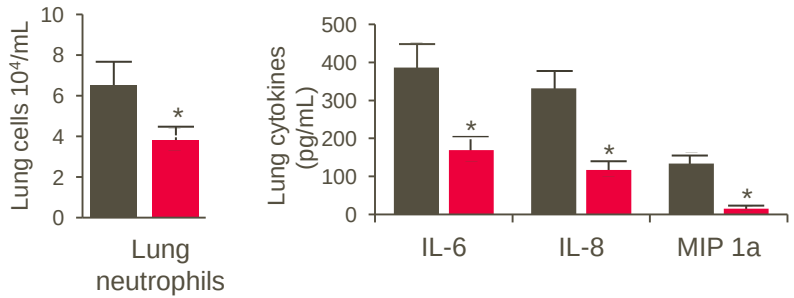
Chu, Allergy Asthma & Clinical Immunology.2015;11:14

* sirukumab is part of a GSK Janssen Biologics (Ireland) collaboration

TSLP dAb: Inhaled biologic

- Thymic Stromal Lymphopoietin (TSLP): key cytokine in epithelial immune response in asthma
- Inhaled domain antibody (dAb) directly targets site of action and reduces systemic exposure to improve risk:benefit profile
- Clinical proof of concept demonstrated for anti-TSLP approach
- Phase I start in 2016

Target engagement after inhaled delivery of dAb: *exemplar*
Inhaled TNFR1 dAb reduced endotoxin (LPS) induced inflammation in healthy volunteers



* p<0.05 t=test
n=18 subjects per group

placebo inhaled TNFR1 dAb (26mg)

Data on file (study TFR116236)

Nucala is at forefront of a diverse asthma biologic pipeline

	Nucala *Anti-IL-5*	**sirukumab** *Anti-IL-6*	*Long acting* *Anti-IL-5 (NBE)*	*Anti-TSLP dAb*	*Anti-IL-5/13*
Modality	mAb	mAb	Extended pharmacology mAb	Inhaled dAb in Ellipta	Bispecific dAb-mAb extended pharmacology
Delivery mechanism	SC	SC	SC	Inhaled	SC
Expected file	2014	2021-25	2021-25	2021-25	2021-25
Status	Filed	Phase II start 2016	Phase I/II start 2017	Phase I start 2016	Preclinical
Asthma segment	Severe eosinophilic	Severe without elevated eosinophils	Moderate-severe eosinophilic	Moderate-severe eosinophilic and neutrophilic	Moderate-severe eosinophilic
Reason to believe	Clinical data and strong mechanism rationale	IL-6 is key driver of non-eosinophilic inflammation	Extended pharmacology allows six monthly dosing	Key cytokine in epithelial immune response; Inhaled - directly targets site of action	Additive efficacy of two complimentary mechanisms, in six monthly dosing

GSK2245035 intranasal TLR7 agonist

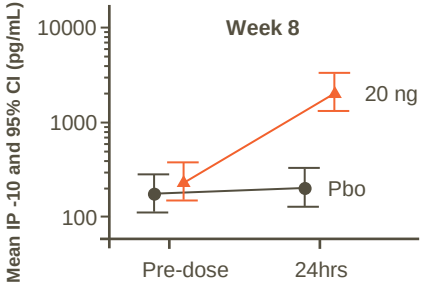
Demonstrates prolonged suppression of allergic response

- Activates immune pathways that suppress exaggerated Th2 response in asthma
- Allergen-independent immune modulation
- Clinical data demonstrate target engagement (IP-10) with no tachyphylaxis
- Protection from nasal allergen challenge up to 3 weeks after last dose
- Weekly treatment may induce remission from asthma
- Phase II asthma study 2016

Status:	Phase IIa
Indication:	Asthma remission
Planned Filing:	2021-2025

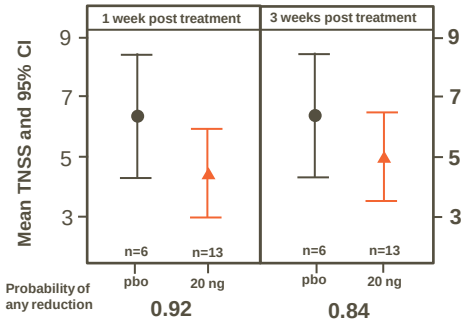
Weekly dosing with intranasal GSK2245035 for 8 weeks in allergic rhinitis patients

Target engagement



Increase in IP-10 levels 24 hours after last dose of 8 weekly treatments

Protection from allergen challenge

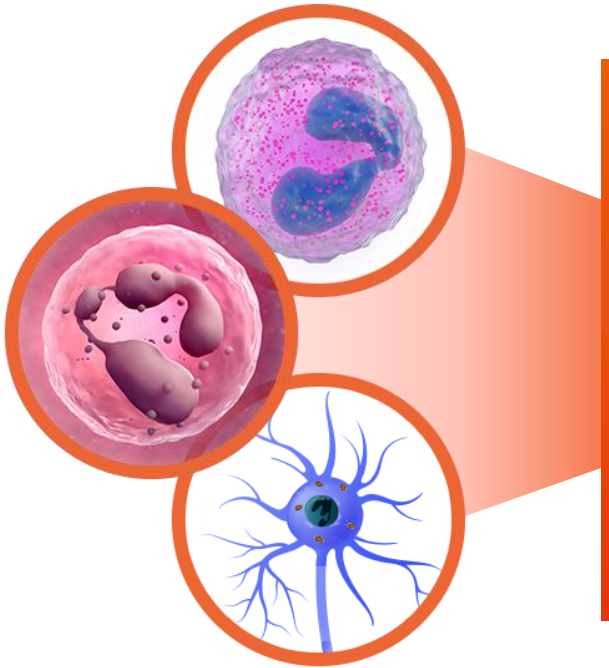


Total nasal symptom score (TNSS) reduced after 8 weekly treatments and maintained 3 weeks after last dose

GSK, data on file (study TL7116958)

Asthma R&D strategy:

From secondary prevention to primary disease modification



GSK Pipeline

Targeted Biologicals

- Nucala
- sirukumab
- Anti-TSLP dAb
- Anti-IL-5/13

Extended Duration Biologicals

- Long-acting anti-IL-5
- Anti-IL-5/13

Once Daily Inhaled

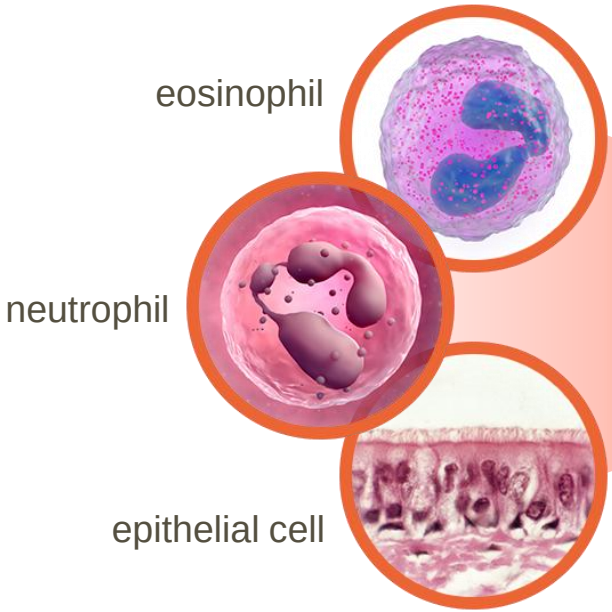
- Relvar/Breo Ellipta™
- Arnuity Ellipta™
- Incruse Ellipta™
- Anti-TSLP dAb

Remission-inducing

- TLR7 agonist

COPD R&D strategy:

Targeting the fundamental drivers of disease



GSK Pipeline

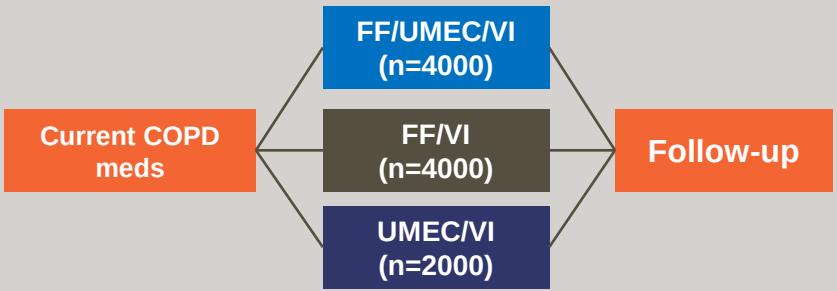
- Targeted Biologicals
- Infection Driven Exacerbations
- Once Daily Inhaled
- Preserve Lung Function

Closed Triple: once daily triple therapy in established Ellipta inhaler

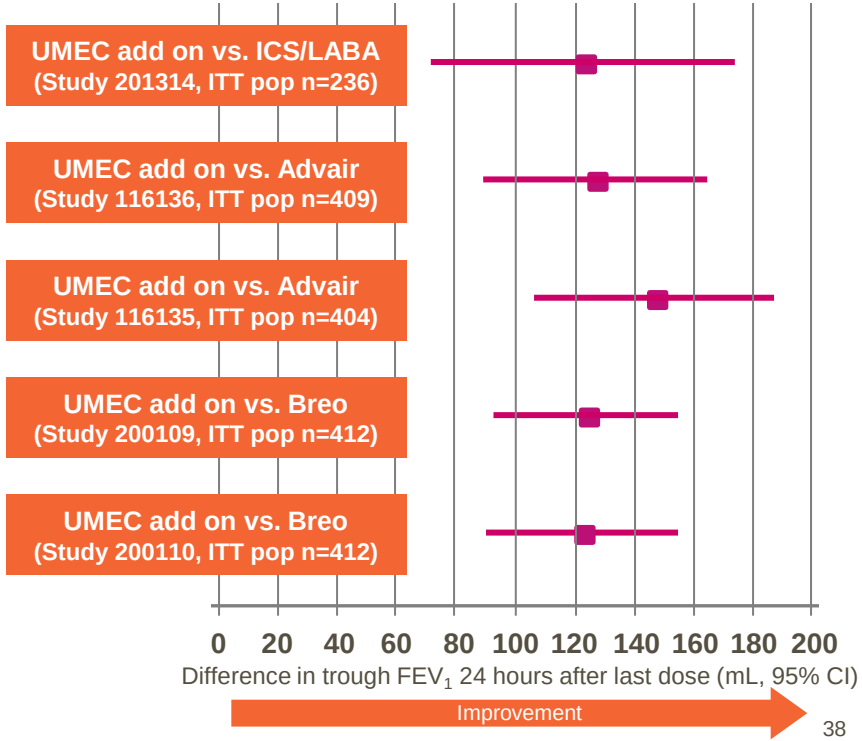
- Collaboration with Theravance
- Open triple filed with FDA
- Phase IIIa lung function study fully recruited (FULFIL)
- EU Closed Triple filing: end 2016 (lung function)
- US Closed Triple filing: H1 2018 (exacerbations)
- Triple therapy already part of some clinical practice[1]

[1]Global Initiative for Chronic Obstructive Lung Disease (GOLD), 2015

Eosinophil signature being evaluated prospectively in IMPACT study



Consistent improvement in lung function with UMEC plus ICS/LABA vs. ICS/LABA

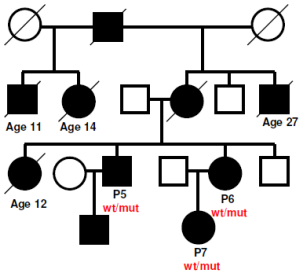


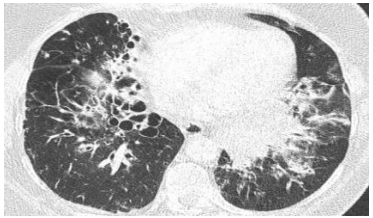
GSK2269557, inhaled PI3Kδ inhibitor targets neutrophil-mediated lung damage in COPD

- PI3Kδ over-activation causes human rare disease activated PI3Kδ syndrome (APDS)
- APDS patients display severe recurrent COPD-like bacterial infections
- Inhaled delivery offers potential efficacy/safety advantage and opportunity for combination therapy
- Target engagement demonstrated in healthy smokers (PIP3)
- GSK2269557 on top of standard of care in COPD shows decreased markers of inflammation
- Currently testing in exacerbating COPD patients and Phase IIb studies to start 2016/17

Status:	Phase IIa
Indication:	COPD exacerbation
Planned Filing:	2021-2025

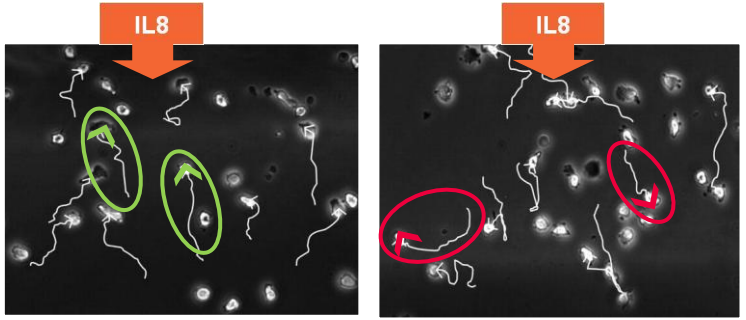
Activating mutations in PI3Kδ in APDS drive lung infections





Angulo *et al*. Science 2013; 342: 866

Directionality of neutrophil migration is aberrant in COPD patients and corrected by PI3Kδ inhibition - *in vitro*



Healthy control **COPD**

Sapey *et al*. AJRCCM 2011;183:1176

Danirixin (GSK1325756): an oral CXCR2 antagonist

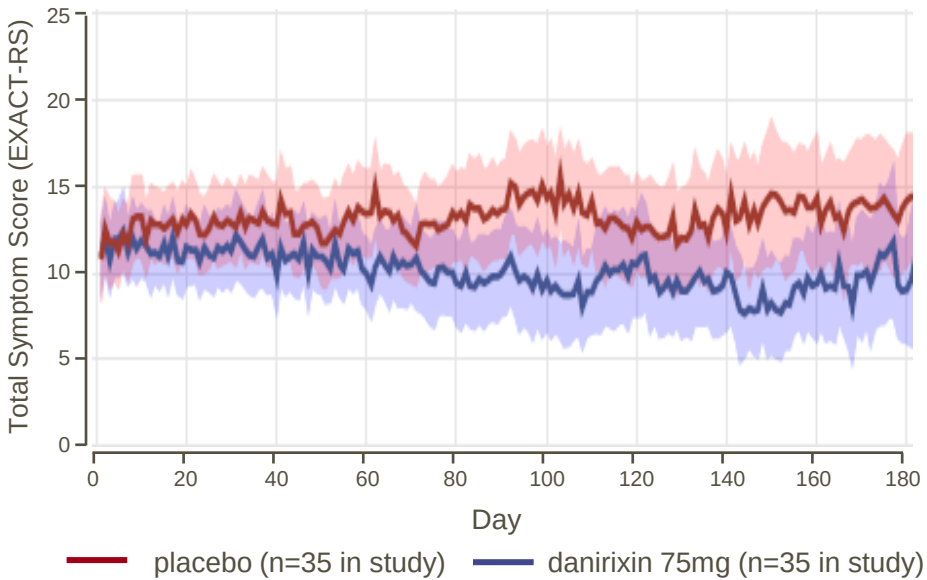
Demonstrates potential to reduce lung damage in COPD

- Blocks chemokine receptor on neutrophils and other cell types (CXCR2)
- Target engagement demonstrated with danirixin (neutrophil activation biomarker, CD11b)
- Competitor compounds produced clinical effects, but with reduction in blood neutrophils[1]
- In the clinic, danirixin has efficacy at a dose not associated with reduced blood neutrophils
- COPD Phase IIb start 2016
- Influenza infection Phase IIa study ongoing

[1]Am J Respir Crit Care Med 2015;191:1001–1011

Status:	Phase IIa
Indication:	Symptomatic COPD
Planned Filing:	2021-2025

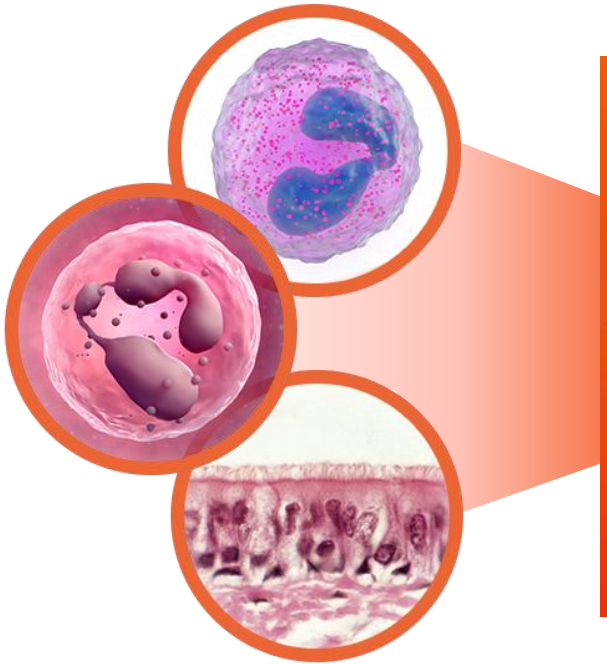
Real-time data demonstrate improvement of symptoms with danirixin in symptomatic COPD (frequent exacerbators)



GSK, data on file (study 200163)

COPD R&D strategy: pipeline

Targeting the fundamental drivers of disease



GSK Pipeline

Targeted Biologicals

- Nucala

Infection Driven Exacerbations

- PI3Kδ
- danirixin

Once Daily Inhaled

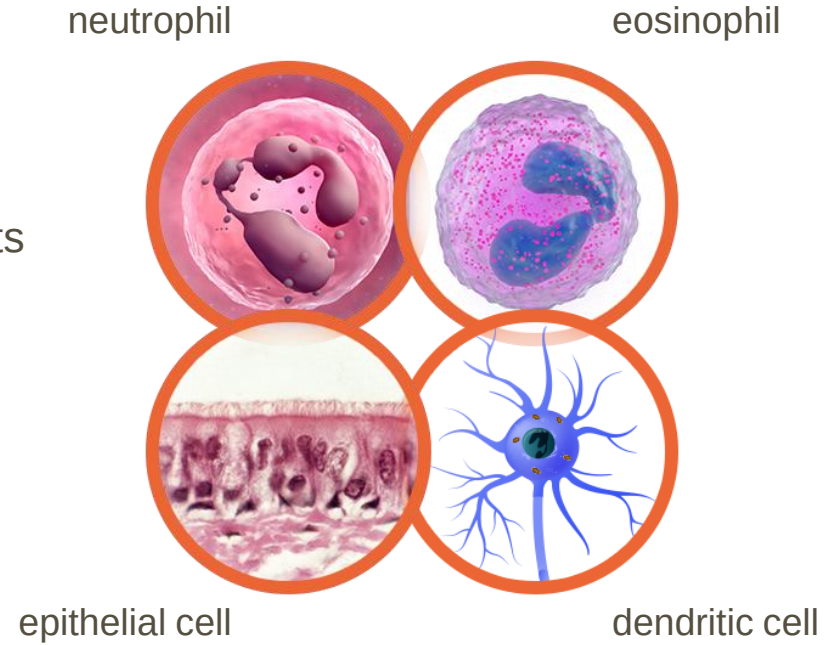
- Anoro™ Ellipta
- Relvar/Breo Ellipta
- Incruse Ellipta
- Closed Triple (Ellipta device)
- GSK961081 +FF
- PI3Kδ

Preserve Lung Function

- PI3Kδ
- danirixin

Drivers of our long-term leadership in asthma and COPD

- Excellence in inhaler / delivery technologies
- Targeted biological know-how
- Deep understanding of novel respiratory targets
- Understanding of patient phenotypes
- Expertise in trial design and delivery



Respiratory R&D beyond Asthma and COPD

Taking our respiratory know-how into new diseases

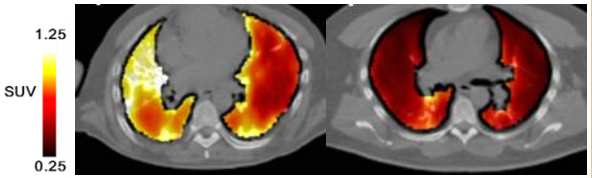
Platform for clinical development of IPF (GSK3008348)

- αvβ6 expression in IPF lung biopsies predicts mortality
- Small molecule inhaled αvb6 inhibitor (deposition of Tc - labelled salbutamol in lungs of IPF patients supports inhaled approach)
- Displacement of αvb6 PET ligand allows dose ranging in patients

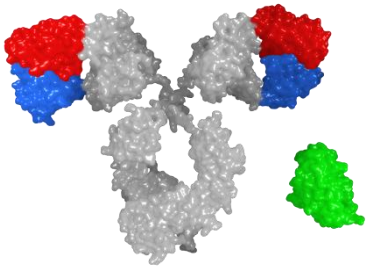
An inhaled dAb platform for acute lung injury (GSK2862277)

- High sTNFR1 levels associated with high mortality
- dAb blocks TNFR1 signalling without impacting beneficial TNFR2 signalling
- Inhaled TNFR1 dAb reduced endotoxin (LPS) induced inflammation in healthy volunteers
- Now in Phase II study

αvβ6 PET ligand binds to fibrotic regions in IPF lungs



αvβ6 PET ligand FDIH



mAb (grey, blue, red) vs. dAb (green)

PHI and Oxygen Sensing

Daprodustat[1] (GSK1278863) low dose PHI for treatment of anaemia of CKD: New Phase IIb data

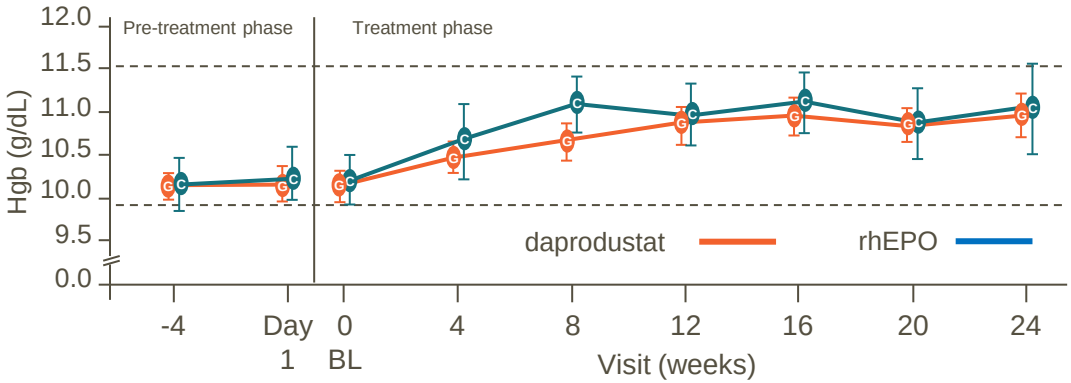
- Standard of care (rhEPO) limited by increased CV risk and IV/SQ administration
- PHI oral tablet to replace injectable rhEPO: low dose, convenient titration, potential for improved CV safety

Phase II summary (IIa and new IIb)

- Phase IIa data recently published[2]
- Raises Hgb in dialysis and non-dialysis subjects, either naïve to or switching from rhEPO
- Low dose (most subjects ≤10mg); Simple titration regimen
- Durable effect (up to 6 months in Phase IIb)
- Minimal elevation in EPO levels; No BP increase
- Safety profile consistent with CKD
- Phase III start 2016

Status:	Phase II
Indication:	Treatment of anaemia of CKD in subjects on dialysis and not yet on dialysis
Planned Filing:	2019 Japan, 2021 US/ROW

daprodustat Phase IIb[3]:
Pre-dialysis subjects naive to rhEPO; target Hgb 10.0-11.5 g/dL (n=96)



[1] USAN, INN approval pending
[2] J Am Soc Nephrol Oct 22, 2015 (epub)
[3] GSK, data on file (Study PHI113737)

Daprodustat: success factors for development

- Low dose
- No inhibition of collagen-4-hydroxylase
- Single Phase III CV outcomes studies for non-dialysis and dialysis

Key success factors	
Large experience in CKD subjects	659 (up to 6 months)
Active comparator for CV safety assessment	Yes (rhEPO)
Low dose	≤ 10mg QD in most subjects
Flexible dose regimen: Non-Dialysis Dialysis	QD QD / TIW
Phase III designed for clear assessment of CV risk	Single CV outcome trials for ND and HD
Inhibition of collagen-4-hydroxylase (cardiac tox risk)	No
Concern for hepatotoxicity (e.g. exclusion of acetaminophen in phase III trials)	No

Daprodustat

Indication expansion to maximise value of HIF-activating mechanism

Diabetic Foot Ulcer

- Preclinical data demonstrate benefit of HIF induction in diabetic skin
- Topical daprodustat formulation in ongoing Phase Ib study
  - No systemic exposure and no Hgb elevation
  - Efficacy data on wound healing in 2016

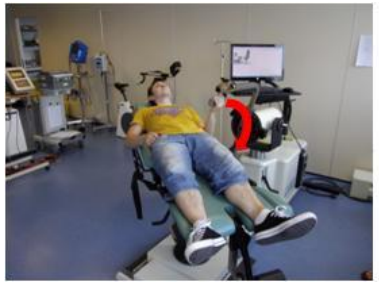
Muscle Injury

- Novel muscle repair activity discovered in pre-clinical injury model
- Phase I: Reduction in muscle injury in healthy volunteers

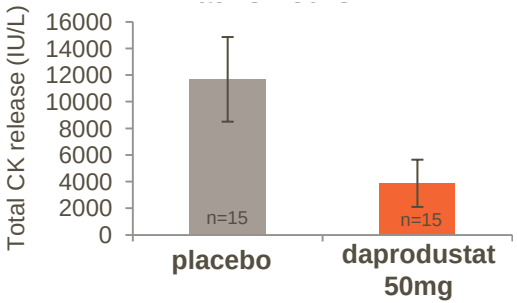
Future potential expansion into other anaemia indications

- Myelodysplastic Syndrome (MDS)
- Peri-surgical anaemia (ortho, GI, CV)

Muscle injury from repetitive arm motion in healthy volunteers



daprodustat reduces total CPK release over 72 hours



GSK, data on file (Study PHI20084)

Introducing our experts

GSK's leading scientists in infectious disease, respiratory medicine and CV

Zhi Hong

Senior Vice President,
Head Infectious Diseases
TAU

John Pottage

Senior Vice President,
Chief Scientific and Medical
Officer for ViiV Healthcare

Dave Allen

Senior Vice President,
Head Respiratory TAU

Edith Hessel

Vice President, Head
Refractory Respiratory
Inflammation DPU

Steve Pascoe

Vice President,
Head Unit Physician
Respiratory

John Lepore

Senior Vice President,
Head Metabolic Pathways
and Cardiovascular

Ruchira Glaser

Clinical Development Director,
Metabolic Pathways and
Cardiovascular

Q&A