



IMPROVING OUTCOMES FOR PATIENTS IN RARE DISEASES

Denise Scots-Knight – CEO
Richard Jones – CFO
Alastair Mackinnon - CMO

December 2018

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Additional Information

Important Additional Information Will be Filed with the SEC

Mereo will file with the SEC a Registration Statement on Form F-4 containing the proxy statement/prospectus of OncoMed that also constitutes a prospectus of Mereo (the "proxy statement/prospectus") and other documents concerning the proposed merger with the SEC. **BEFORE MAKING ANY VOTING DECISION, INVESTORS AND STOCKHOLDERS ARE URGED TO CAREFULLY READ THE PROXY STATEMENT/PROSPECTUS, AND OTHER RELEVANT DOCUMENTS TO BE FILED WITH THE SEC, IN THEIR ENTIRETY WHEN THEY BECOME AVAILABLE AND ANY OTHER DOCUMENTS FILED BY EACH OF MEROE AND ONCOMED WITH THE SEC IN CONNECTION WITH THE PROPOSED MERGER OR INCORPORATED BY REFERENCE THEREIN BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT MEROE, ONCOMED, THE PROPOSED TRANSACTIONS AND RELATED MATTERS.** Investors and stockholders will be able to obtain free copies of the proxy statement/prospectus and other documents filed with the SEC by the parties through the website maintained by the SEC at www.sec.gov. In addition, investors and stockholders will be able to obtain free copies of the proxy statement/prospectus and other documents filed with the SEC on Mereo's website at www.mereobiopharma.com (for documents filed with the SEC by Mereo) or on OncoMed's website at www.oncomed.com (for documents filed with the SEC by OncoMed).

Participants in the Solicitation

Mereo, Oncomed and their respective directors, executive officers and certain employees may be deemed to be participants in the solicitation of proxies from the stockholders of Mereo and OncoMed, respectively in connection with the proposed merger. Stockholders may obtain information regarding the names, affiliations and interests of OncoMed's directors and officers in OncoMed's Annual Report on Form 10-K for the fiscal year ended December 31, 2017, which was filed with the SEC on March 8, 2018, and its definitive proxy statement on Schedule 14A for the 2018 annual meeting of stockholders, which was filed with the SEC on April 27, 2018. To the extent the holdings of OncoMed's securities by the Company's directors and executive officers have changed since the amounts set forth in OncoMed's proxy statement for its 2018 annual meeting of stockholders, such changes have been or will be reflected on Statements of Change in Ownership on Form 4 filed with the SEC. Information regarding the names, affiliations and interests of Mereo's directors and officers is contained in Mereo's Annual Report for the fiscal year ended December 31, 2017 and can be obtained free of charge from the sources indicated above. Additional information regarding the interests of such individuals in the proposed merger will be included in the proxy statement/prospectus relating to the proposed merger when it is filed with the SEC. These documents (when available) may be obtained free of charge from the SEC's website at www.sec.gov, OncoMed's website at www.oncomed.com and Mereo's website at www.mereobiopharma.com.

FORWARD LOOKING STATEMENTS

Forward-Looking Statements

This communication contains "forward-looking statements". All statements other than statements of historical fact contained in this report are forward-looking statements within the meaning of Section 27A of the United States Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the United States Securities Exchange Act of 1934, as amended (the "Exchange Act"). Forward-looking statements usually relate to future events and anticipated revenues, earnings, cash flows or other aspects of our operations or operating results. Forward-looking statements are often identified by the words "believe," "expect," "anticipate," "plan," "intend," "foresee," "should," "would," "could," "may," "estimate," "outlook" and similar expressions, including the negative thereof. The absence of these words, however, does not mean that the statements are not forward-looking. These forward-looking statements are based on our current expectations, beliefs and assumptions concerning future developments and business conditions and their potential effect on us. While management believes that these forward-looking statements are reasonable as and when made, there can be no assurance that future developments affecting us will be those that we anticipate.

Factors that could cause actual results to differ materially from those in the forward-looking statements include failure to obtain applicable stockholder approvals in a timely manner or otherwise; failure to satisfy other closing conditions to the proposed transaction; failure to realize anticipated benefits of the proposed transaction; risks relating to unanticipated costs, liabilities or delays of the transaction; failure or delays in research and development programs; unanticipated changes relating to competitive factors in the companies' industry; risks relating to expectations regarding the capitalization, resources and ownership structure of the combined organizations; the availability of sufficient resources for combined company operations and to conduct or continue planned clinical development programs; the outcome of any legal proceedings related to the merger; risks related to the ability to correctly estimate operating expenses and expenses associated with the merger; risks related to the ability to project future cash utilization and reserves needed for contingent future liabilities and business operations; risks related to the changes in market prices of the shares of OncoMed's common stock or Mereo's ordinary shares relative to the exchange ratio; ability to hire and retain key personnel; the potential impact of announcement or consummation of the proposed transaction on relationships with third parties; changes in law or regulations affecting the companies; international, national or local economic, social or political conditions that could adversely affect the companies and their business; conditions in the credit markets; risks associated with assumptions the parties make in connection with the parties' critical accounting estimates and other judgments.

All of our forward-looking statements involve risks and uncertainties (some of which are significant or beyond our control) and assumptions that could cause actual results to differ materially from our historical experience and our present expectations or projections. You should carefully consider the foregoing factors and the other risks and uncertainties that affect the parties' businesses, including those described in OncoMed's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other documents filed from time to time by OncoMed and Mereo's with the United States Securities and Exchange Commission (the "SEC") and those described in Mereo's annual reports, relevant reports and other documents published from time to time by Mereo. We wish to caution you not to place undue reliance on any forward-looking statements, which speak only as of the date hereof. We undertake no obligation to publicly update or revise any of our forward-looking statements after the date they are made, whether as a result of new information, future events or otherwise, except to the extent required by law.



**COMBINATION OF MERE0 AND
ONCOMED**



KEY TRANSACTION TERMS

Combined company will operate as Mereo BioPharma

Upfront Stock Consideration	<ul style="list-style-type: none">• Issuance of new Mereo shares (in the form of newly registered ADRs) to OncoMed shareholders• Ownership split on completion 75% Mereo / 25% OncoMed shareholders⁽¹⁾• Consideration represents a total value of \$57 million and a 34% premium to OncoMed's total market cap as of market close on 4 Dec 2018
Contingent Value Rights	<ul style="list-style-type: none">• TIGIT: Issuance of additional Mereo ADRs if OncoMed's partner Celgene exercises its opt in right on the TIGIT program before 31 Dec 2019<ul style="list-style-type: none">• Value to OncoMed shareholders will represent 100% of net Celgene milestone payment actually received – \$35m in Celgene contract• Number of Mereo ADRs to be issued calculated based on prevailing Mereo share price following milestone announcement⁽²⁾• NAVI: Cash payment of 70% of the net proceeds of any milestones received by Mereo in relation to NAVI for 5 years following completion<ul style="list-style-type: none">• Subject to a cap of approximately \$80 million
Management & Governance	<ul style="list-style-type: none">• Mereo's CEO, Denise Scots-Knight, and existing management team will lead combined company• Board of directors will include 8 existing Mereo board members (including chair) and 2 new members from OncoMed• London, UK headquarters and US operational base in Redwood City, California
Approvals & Closing	<ul style="list-style-type: none">• Transaction has been unanimously approved by the Board of Directors of each company• Expected closing in H1 2019, subject to OncoMed shareholder approval

⁽¹⁾ Based on the total number of Mereo ordinary shares currently outstanding and subject to an adjustment mechanism based on target OncoMed cash balance of \$38 million at closing







⁽²⁾ New ADRs to be issued at completion or pursuant to the TIGIT CVRs will be subject to a total dilution cap such that they do not represent more than 66.7% of Mereo's issued share capital prior to completion (or equivalently, 40% of the enlarged share capital)

STRATEGIC RATIONALE FOR THE COMBINATION

1 Combined portfolio of seven assets with near-term value catalysts	2 Strong combined cash position	3 US and UK stock market listing	4 Enhanced team, capabilities and infrastructure
<ul style="list-style-type: none">• Three phase 2 readouts in core orphan products in 2019 (Mereo's BPS-804 and MPH-966)• Potential partnerships of Mereo's BCT-197 and BGS-649 programs• Potential partnership of OncoMed's navicixizumab• Ongoing Celgene collaboration with an option to license OncoMed's etigilimab	<ul style="list-style-type: none">• Extends Mereo's operational runway into 2020• Pro-forma combined cash balance of \$115.5 million as of 30 September 2018• Opportunity to further extend through partnering or etigilimab option exercise	<ul style="list-style-type: none">• Increased liquidity for shareholders• More diversified, global shareholder base• US institutional specialist healthcare investors	<ul style="list-style-type: none">• Two new biopharma industry-experienced independent non-executive directors• Combined expertise in product development and regulatory affairs• UK headquarters in London• US operational base in Redwood City, California

MANAGEMENT & GOVERNANCE

Industry Leading Management Expertise

Executive	Select Experience
 <p>Dr. Denise Scots-Knight Chief Executive Officer</p>	  
 <p>Richard Jones Chief Financial Officer</p>	 
 <p>Dr. Alastair MacKinnon Chief Medical Officer</p>	  
 <p>Charles Sermon General Counsel</p>	  
 <p>John Richard Head of Corporate Development</p>	  
 <p>Wills Hughes-Wilson Head of Patient Access & Commercial Planning</p>	 

Enlarged Group Board of Directors

Mereo board will be expanded to include two of OncoMed's directors

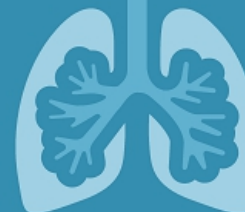
 <p>Dr. Peter Fellner Chairman</p>	 <p>Dr. Denise Scots-Knight Executive Director CEO and Co-Founder</p>
 <p>Richard Jones Executive Director CFO</p>	 <p>Dr. Anders Ekblom Non-Executive Director</p>
 <p>Dr. Frank Armstrong Non-Executive Director</p>	 <p>Peter Bains Non-Executive Director</p>
 <p>Kunal Kashyap Non-Executive Director</p>	 <p>Paul Blackburn Non-Executive Director</p>
+	
  <p>Deepa R. Pakianathan Non-Executive Director</p>	 <p>Michael Wyzga Non-Executive Director</p>

NEXT STEPS

- Filing with the SEC of a Registration Statement on Form F-4 for Mereo
- Proxy statement of OncoMed (to be included in Mereo Form F-4)
- OncoMed shareholder meeting

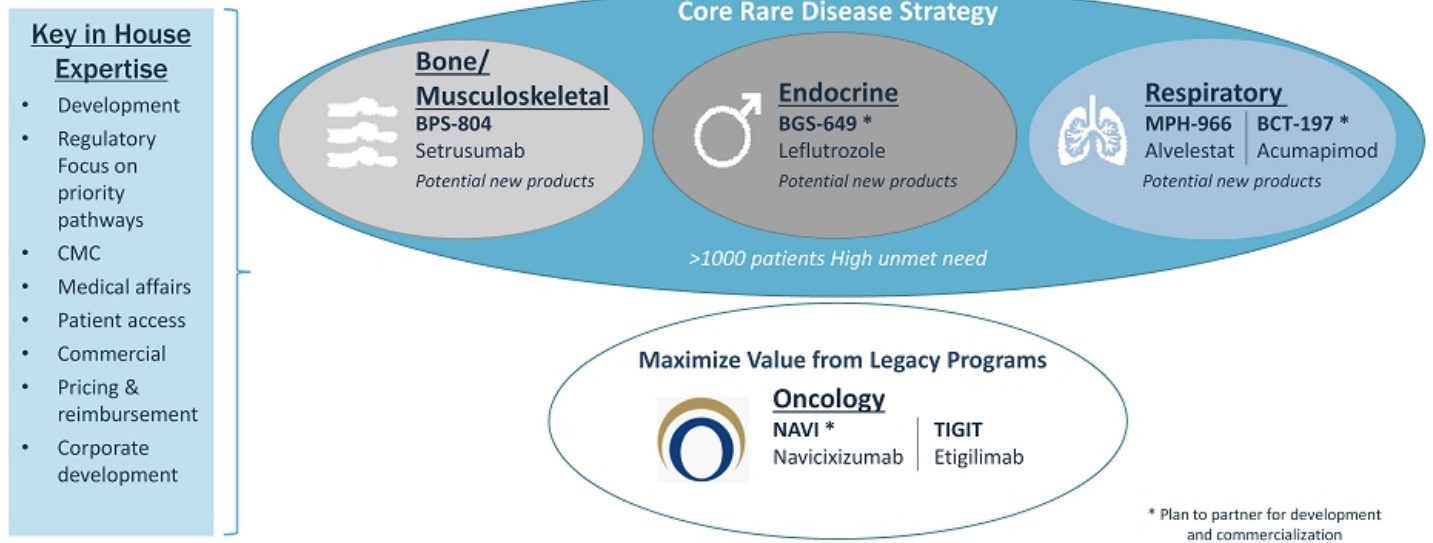
Targeting completion in H1 2019

OVERVIEW OF THE ENLARGED MEREIO







CORPORATE AND COMMERCIAL STRATEGY

The core strategy of the combined business will remain focused on orphan diseases



MEREO'S CURRENT PRODUCT PIPELINE


Product Candidate Indication	Phase 1	Phase 2a	Phase 2b	Last Milestone	Next Anticipated Milestones
BPS-804 (setrusumab) <i>Osteogenesis Imperfecta</i>				Phase 2b initiated	Top-line data from open label arm of Phase 2b trial in adults in 1H 2019 and commence pediatric Phase 3 study in Europe and Canada in 2019
MPH-966 (alvelestat) <i>Severe Alpha-1 Antitrypsin Deficiency</i>				Positive Phase 2 data in bronchiectasis	Phase 2 trial top-line data in severe AATD in 4Q 2019
BCT-197 (acumapimod) <i>Acute Exacerbations of COPD</i>				Positive Phase 2 data	Enter into strategic relationship for further clinical development
BGS-649 (leflutrozoole) <i>Hypogonadotropic Hypogonadism in Obese Men</i>				Positive Phase 2b data	Phase 2b extension study data 4Q 2018

OVERVIEW OF ONCOMED

OncoMed Overview

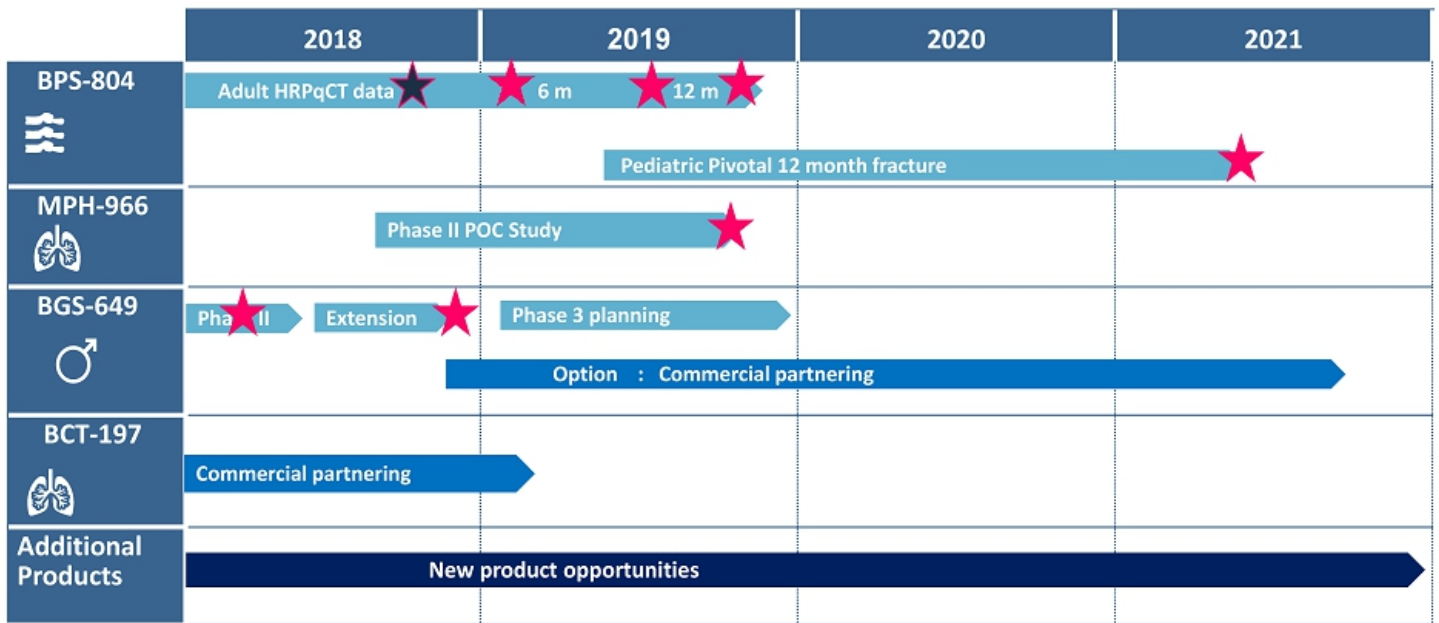
- Clinical stage biopharmaceutical company focused on discovering and developing novel anti-cancer therapeutics
- Headquartered in Redwood City, California
- Currently has three therapeutic candidates in clinical development (Phase 1/1b)
- Extensive experience in administrative, regulatory and clinical project management
- Established partnership with Celgene Corp
- Net cash of \$70.9 million as of 30 Sep 2018

Key Product Overview & Pipeline

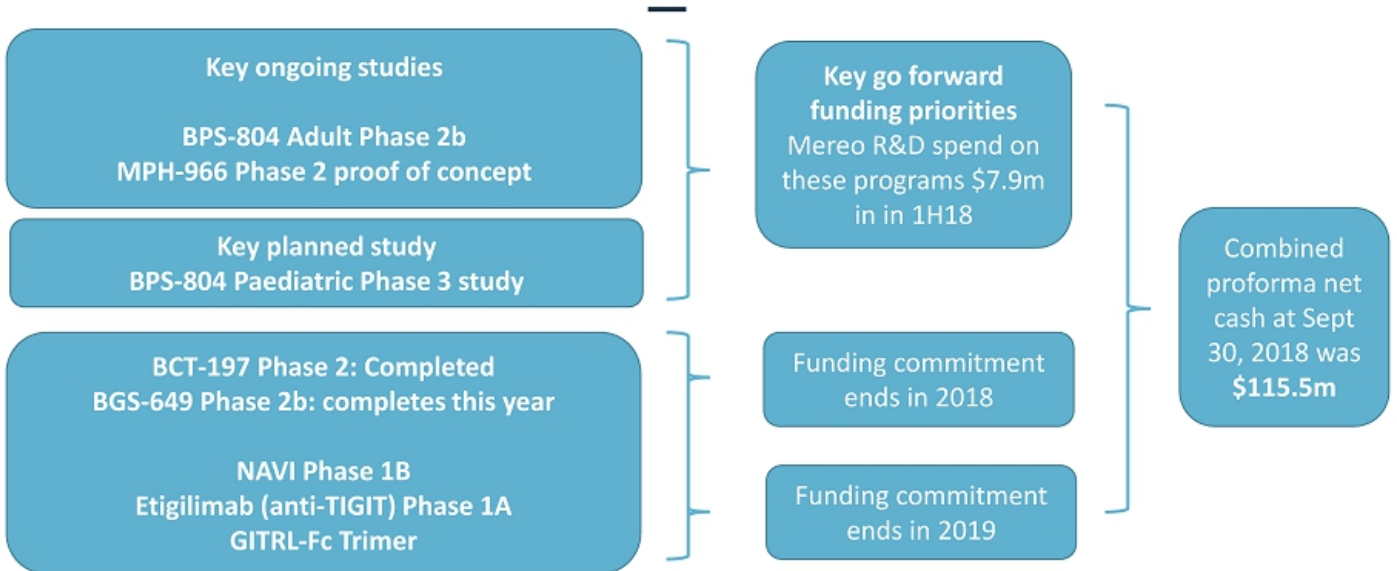
- **Navicixizumab** ("NAVI"): bispecific monoclonal antibody that targets and inhibits both Delta-like ligand 4 and vascular endothelial growth factor
- **Etigilimab** ("anti-TIGIT"): antibody that targets the T-cell immunoreceptor with immunoglobulin and ITIM domains (TIGIT), an inhibitory receptor that is thought to stop T-cells from attacking tumor cells 
- **GITRL-Fc** ("GITRL"): member of the tumor necrosis factor family of ligands and functions to activate the co-stimulatory receptor GITR to enhance T-cell modulated immune responses

Product Candidate	Pre-Clinical	Phase 1A	Phase 1B	Current Status
Navicixizumab (NAVI)		Phase 1		• Phase 1B clinical trial under way
Etigilimab (anti-TIGIT)		Phase 1A		• Phase 1a and 1b underway • Potential to realize \$35m milestone from Celgene
GITRL-Fc Trimer (GITRL)		Phase 1A		• Phase 1a data due in 2019

MEREO'S UPCOMING KEY MILESTONES



COMBINED GROUP CASH RUNWAY FURTHER EXTENDED INTO 2020



Post merger, additional funding expected via partnering opportunities for the non-rare disease products



BPS-804
SETRUSUMAB
(ACQUIRED FROM NOVARTIS IN 2015)

OSTEOGENESIS IMPERFECTA A SEVERE GENETIC BONE DISEASE



THE NEW PAPER/Photo: December 22, 1995

SINGAPORE TODAY

He's broken bones 15 times

FROM PREVIOUS PAGE

JEREMY Lim has broken his bones 15 times. The five-year-old has osteogenesis imperfecta, a bone disease since birth.

Two days after his birth, he fractured a rib and had his legs bandaged up in a splint in hospital.

Jeremy is too weak to walk. Though he has learned the way to sit, he cannot engage in rough games.

If he does, he might fracture his limbs.

His mother, SEA Games trackworld champion and medical officer Wong Liang Ming said, "I always worry about him when I'm in competition events. Nobody knows the kind of mental anguish I go through then."

"The doctors say it is because of the shortage of a particular hormone that strengthens collagen in the body."

"The disease hits me in every 30,000."

"But why Jeremy?" wondered Liang Ming.

"Sometimes, in the middle of the night, he'll scream in pain. And we'll know he's fractured a bone just by turning and feeling as he'll be truly hurt but we have to live with it."

But, if anything, the attention has brought mother and son closer together.

"To me, he is the most precious thing in life. I wouldn't want anything in the world to come between him and me. I think he knows he also made me and my husband even more careful of the needy and

more tolerant in life," said the trackworld star.

"We tend to appreciate the simple things in life and the way parents feel about their children even more."

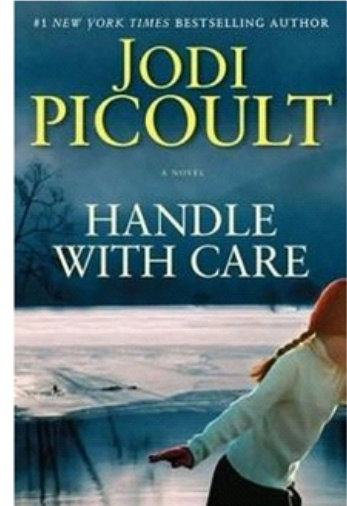
According to Liang Ming, Jeremy's doctor has told her that when his bones grow, he would have to undergo a few operations.

"The operations are to insert rods to strengthen his limbs," she said.

"But until then, we will have to take extra looking after his normal check."

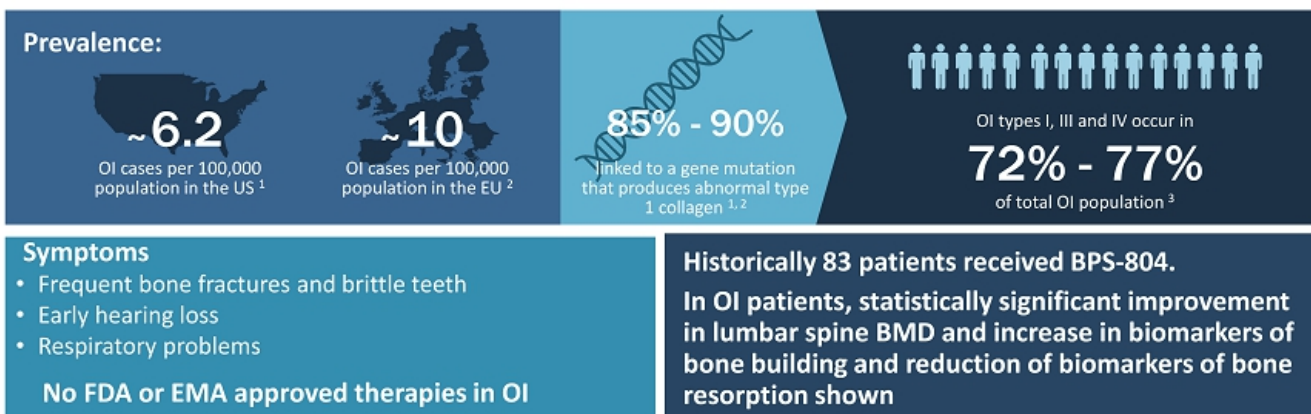
Sometimes, in the middle of the night, he'll scream in pain. And we'll know he's fractured a bone just by turning and feeling as he'll be truly hurt but we have to live with it.

— Wong Liang Ming on son Jeremy's disease



OSTEOGENESIS IMPERFECTA (OI)

An orphan genetic chronic bone disorder characterised by fragile bones that break easily



1) Based on Osteogenesis Imperfecta Foundation estimates

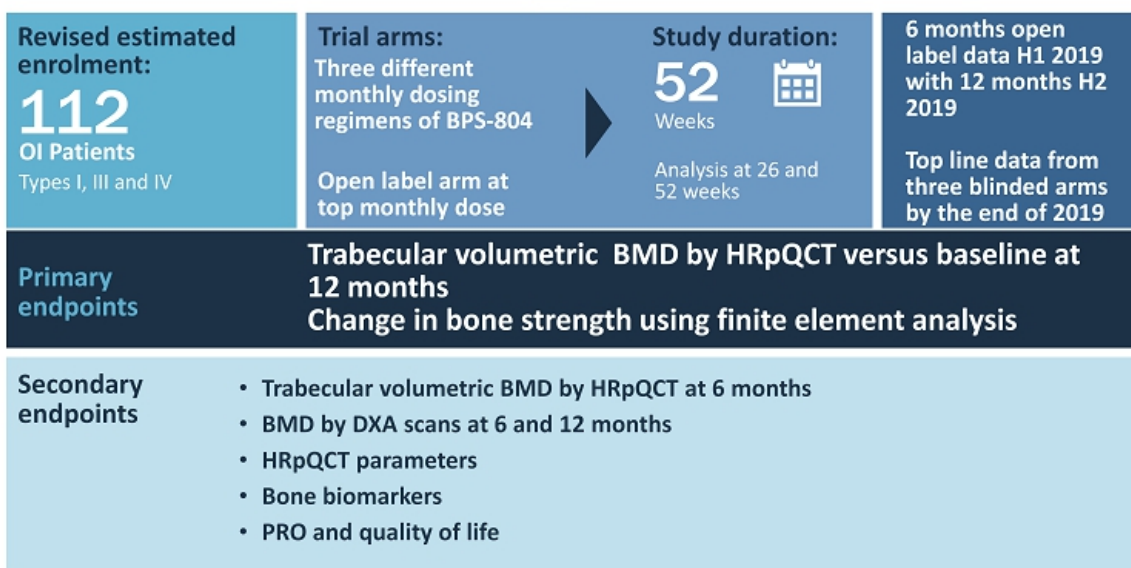
2) Based on Orphanet estimates

3) Shapiro J (2014) Osteogenesis Imperfecta: A Translational Approach to Brittle Bone Disease, Academic Press, Chapter 2: p15-22

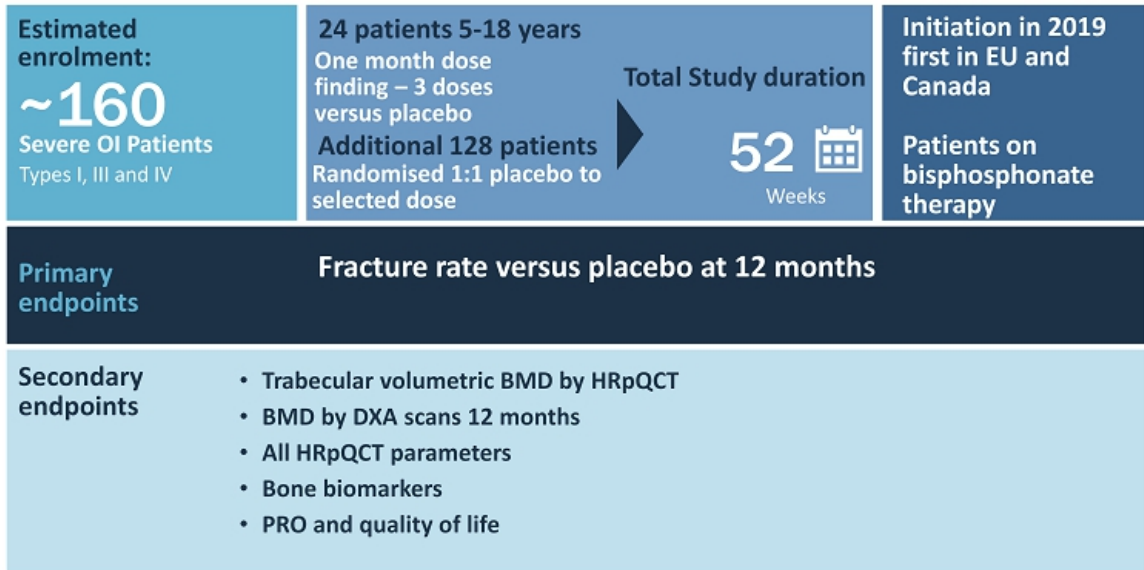
OI TREATMENT: DRUGS USED – NONE FDA OR EMA APPROVED FOR OI

- Bisphosphonates
 - Alendronate, risedronate, pamidronate, zoledronate, etc.
 - Approved for treatment of adult osteoporosis
 - Synthetic analogues of pyrophosphate
 - Inhibit bone resorption
 - Can be given orally or intravenously, depending on compound
- PTH analogue
 - Teriparatide (Forteo®)
 - Increases number + activity of osteoblasts
 - Increases bone turnover
 - Usefulness in OI not clear
 - Black box warning due to potential risk of osteosarcoma
- RANKL Inhibitor
 - Denosumab (Prolia®)
 - Inhibits bone resorption

BPS-804 ADULT PHASE 2B STUDY

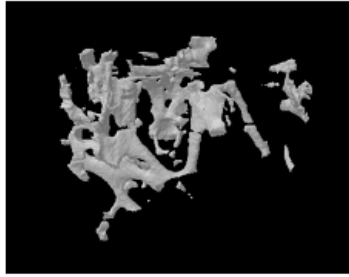


BPS-804 – PEDIATRIC PHASE 3 STUDY

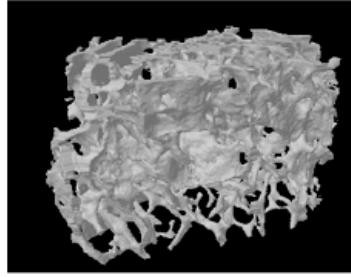


BRITTLE MOUSE MODEL – TREATMENT WITH BPS-804

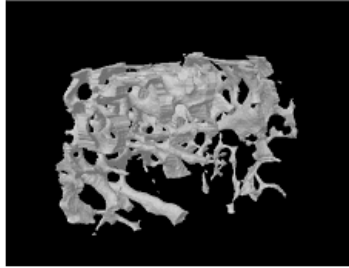
Mature Brtl control



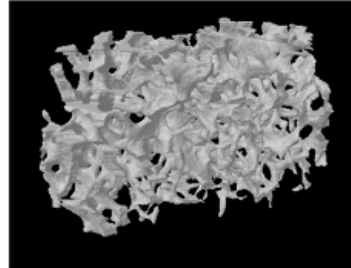
Mature WT Control



Mature Brtl treated



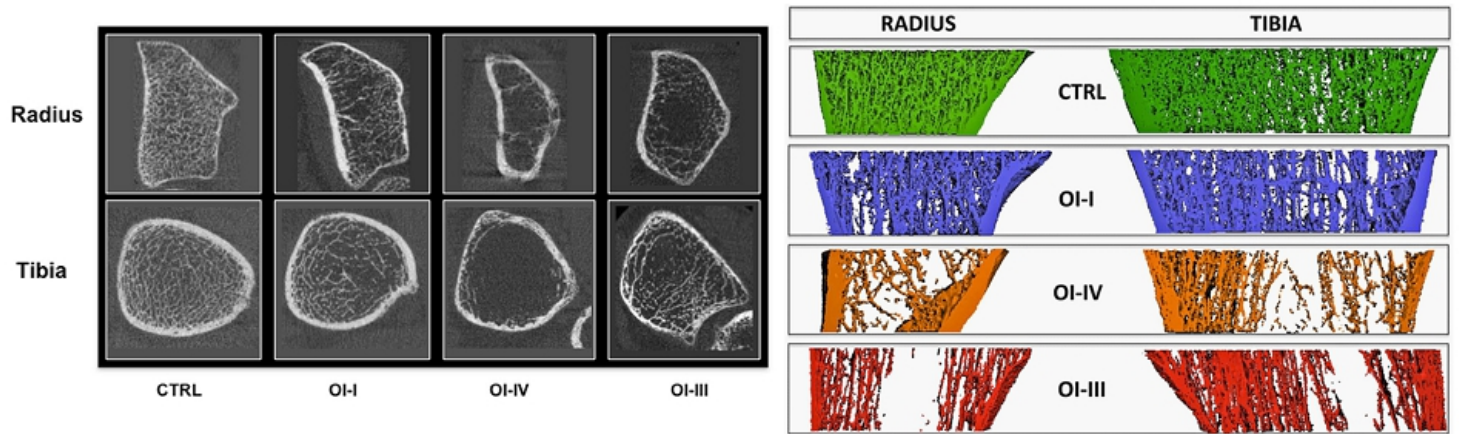
Mature WT Treated



THE OFLEY STUDY AND HRPQCT

- Prospective study investigating the prediction of fracture (Fx) by bone microarchitecture assessed by HR-pQCT in postmenopausal women
- HR-pQCT used to measure microarchitecture at the distal radius and tibia in 589 women (mean 68 years old)
- During 9 year follow up 135 women sustained a fracture including 81 women with a major osteoporotic fracture
- After adjusting for age women who had fractures had significantly lower total and trabecular volumetric densities (vBMD) at both sites as determined by HRpQCT
- OI patients have fewer and thinner trabeculae and increased cortical porosity

HRPQCT SCANS OF PATIENTS WITH OI AND CONTROLS



BPS-804 REGULATORY UPDATE

<p>Orphan drug status EU and US</p> <p>PIP agreed with EMA</p>	<p>Admitted to the Adaptive Pathway and PRIME in the EU</p> <ul style="list-style-type: none">• Ongoing interactive dialogue with EMA and HTA's• Real world evidence/registries	<p>Plan to engage with the FDA on extending the pediatric Phase 3 trial to sites in the United States</p> <p>Will initiate the study in EU and Canada</p>
<ul style="list-style-type: none">• Validation of HRpQCT in the pediatric study• Once validated, the use of HRpQCT data may be sufficient to support submission of a CMA to the EMA for the treatment of adults with OI in the EU• CMC plan under review with the regulators		



MPH-966 (formerly AZD-9668)
ALVELESTAT

(ACQUIRED FROM ASTRA ZENECA IN 2017)



ALPHA-1 ANTITRYPSIN DEFICIENCY (AATD)

An orphan genetic disorder that results in pulmonary disease

Estimated prevalence of target patients (PiZZ and Nulls)

North America
~50,000

Europe
~60,000

Genetic mutation produces deficiency through abnormal folding of the protein or zero production of the protein



Mutations in SERPPINA1 gene chromosome 14

Only homozygotes (ZZ's) and Nulls have severe disease

Symptoms:

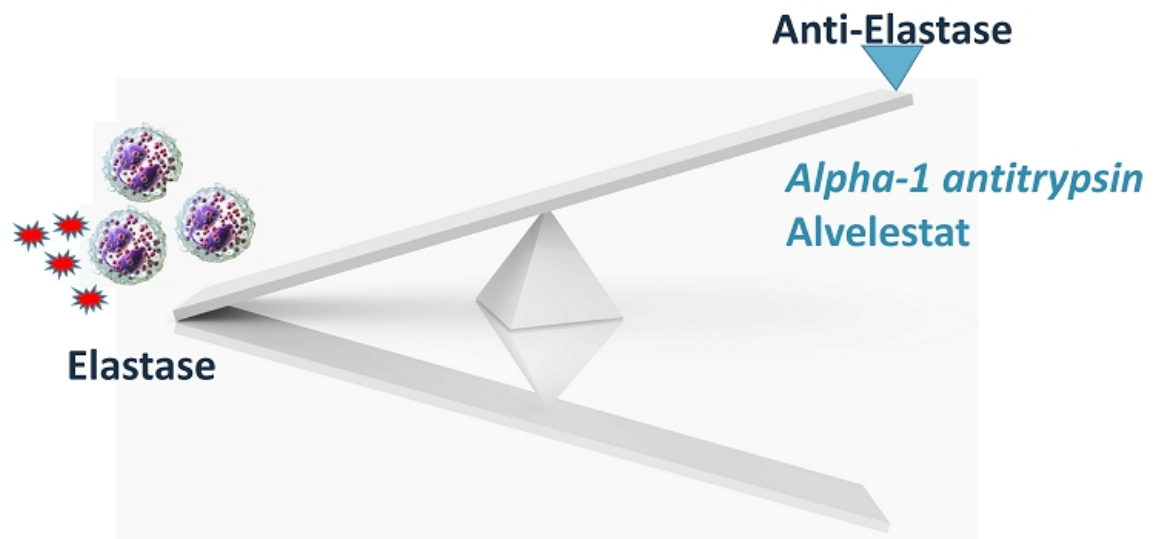
- Age 20-50 - wheeze and reduced exercise tolerance
- PiZZ and Null adults develop early onset emphysema
- Some mutations can cause cirrhosis in children
- Reduced life expectancy

Current treatment is weekly IV alpha 1 antitrypsin protein – annual cost up to \$150k ~9000 patients

MPH-966 in 1000 patients in 4 COPD studies and a cystic fibrosis and bronchiectasis study (positive)

Francisco et al (2012) Rare alpha-1-antitrypsin variants: are they really so rare? Therapeutic Advances in Respiratory Disease January 30
Luisetti et al (2004) α_1 -Antitrypsin deficiency - 1: Epidemiology of α_1 -antitrypsin deficiency Thorax 59:164-169

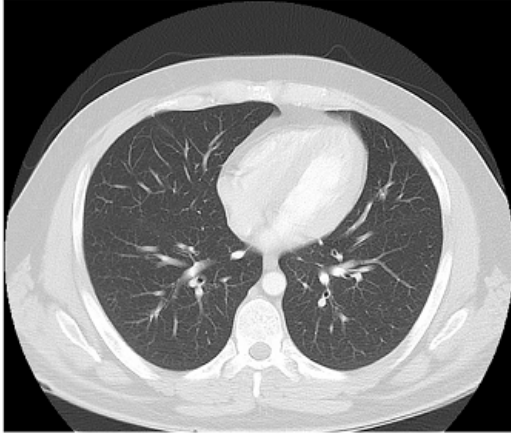
RESTORING THE BALANCE IN ALPHA-1 LUNG DISEASE
WITH NEUTROPHIL ELASTASE INHIBITOR - ALVELESTAT



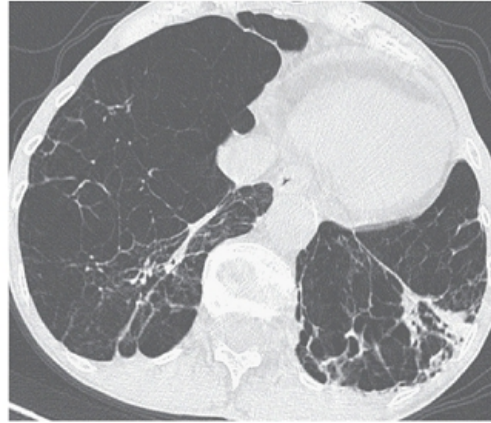
CT IMAGES SHOWING THE LUNG OF AN ALPHA-1 ANTITRYPSIN DEFICIENT PATIENT

—

Normal lung



AATD lung



MPH-966– RELEVANT CLINICAL STUDIES TO-DATE

Bronchiectasis

- Total of 38 patients in one study
- 22 patients treated for 4 weeks with 60mg BD
- Statistically significant improvement in FEV1 and clinically meaningful improvement in SVC (slow vital capacity)

Cystic Fibrosis

- Total of 56 patients in one study
- 27 patients treated for 4 weeks with 60mg BD
- Statistically significant reduction in the biomarker urine desmosine

- **In addition total of 970 patients across four COPD studies**

MPH-966 – PROOF OF CONCEPT PHASE 2 STUDY

- Three-arm study with two different dosing arms versus placebo
- Planned enrollment- 165 patients completed
- Treatment duration- 12 weeks
- FPI in November 2018

Primary Endpoint

- Desmosine - biomarker shown to have correlation with lung density by CT scan¹

Proposed Patient Population

- CT scan - emphysema
- Confirmed genotype (PiZZ or Null)
- FEV1>25%

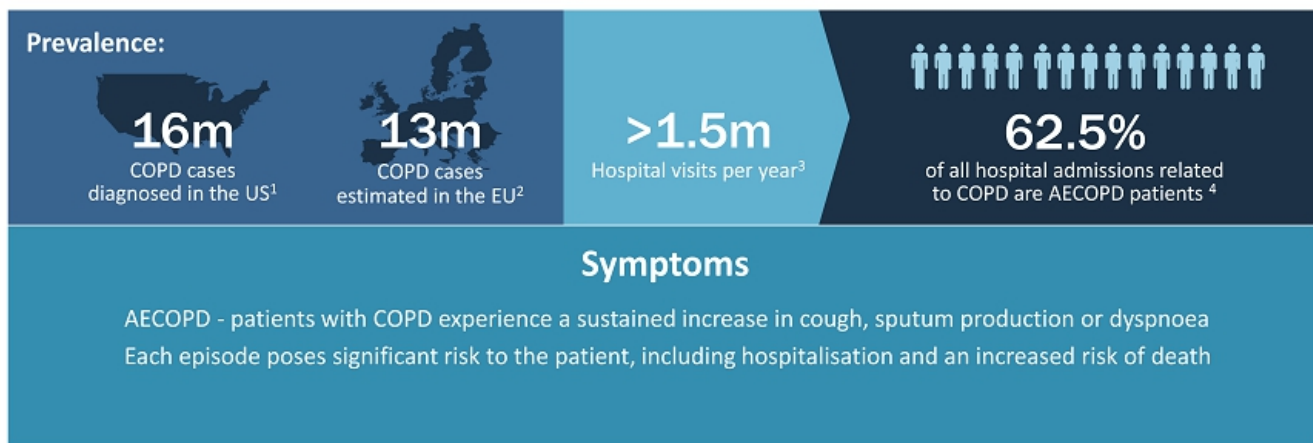
1) A biomarker in KAMADA's RAPID study. Ref: Ma S, Lin YY, Cantor JO, et al. The effect of alpha-1 proteinase inhibitor on biomarkers of elastin degradation in alpha-1 antitrypsin deficiency: An analysis of the RAPID/RAPID Extension trials. *Chronic Obstr Pulm Dis.* 2017; 4(1): 34-44.



BCT-197
ACUMAPIMOD
(ACQUIRED FROM NOVARTIS IN 2015)

ACUTE EXACERBATIONS OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (AECOPD)

COPD includes chronic bronchitis, emphysema and some forms of bronchiectasis



1) National Heart, Lung and Blood Institute (accessed in Nov 2017)
2) COPD Coalition
3) Mannino et al (2002) MMWR Surveill Summ 51: p1-6

4) Wier et al (2011) AHRQ, HCUP, Statistical Brief #106 p1-11

BCT-197 MET THE PRIMARY END-POINT IN THE PHASE 2 TRIAL

TOTAL OF 282 PATIENTS

PRIMARY ENDPOINT (CHANGE IN FEV1 FROM BASELINE TO DAY 7 WITHIN THE TREATMENT GROUP)

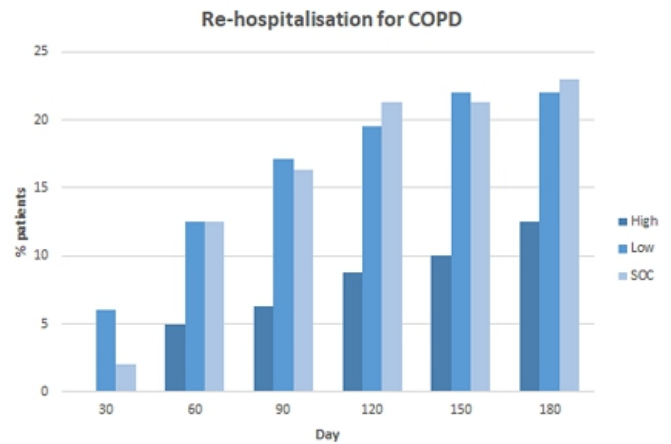
Primary endpoint met on an ITT basis for both high and low dose regimens ($p=0.012$, $p \leq 0.001$) versus no significant change from baseline ($p=0.102$) for Standard of Care plus placebo

POSITIVE CLINICAL AND HEALTH ECONOMIC OUTCOMES SUPPORTED BY OTHER SECONDARY MEASURES

Statistically significant reduction of more than 50% ($p \leq 0.027$ to 0.05) in the number of clinical treatment failures compared to standard of care plus placebo as measured by the number of re hospitalisations for the treatment of COPD at days 90 through 150

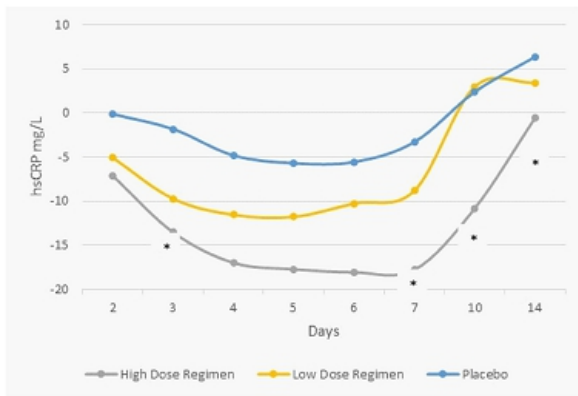
SAFETY

BCT-197 was reported to be safe and well tolerated with adverse events in line with expectations for this patient population

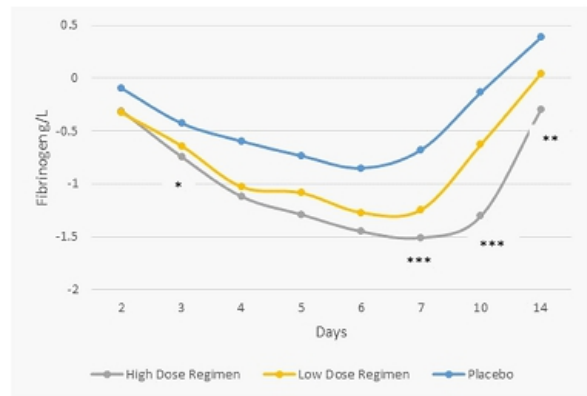


BCT-197 RESULTED IN A SIGNIFICANT REDUCTION IN THE INFLAMMATORY MARKERS HSCRP AND FIBRINOGEN IN THE FIRST 14 DAYS DURING THE INDEX EXACERBATION

- Dose – dependent, statistically significant reductions in key inflammatory markers hsCRP and fibrinogen
- Suppression of hsCRP maintained through the 26-week observation period



P- values compared to placebo
 * = <0.05 NS= p>0.05



P- values compared to placebo
 * = <0.05 **=<0.02 ***=<0.01



BGS-649
LEFLUTROZOLE
(ACQUIRED FROM NOVARTIS IN 2015)

HYPOGONADOTROPIC HYPOGONADISM (HH) IN OBESE MEN

A highly prevalent clinical syndrome that results from inadequate levels of testosterone



1) Based on 2016 WHO estimates
2) Hofstra et al (2008) Netherlands J. Med. 66 p103-109
3) Update on Hypogonadism and Testosterone Replacement Therapy (2011) Chapter in Practicing Clinical Exchange p1-15

HYPOGONADOTROPIC HYPOGONADISM – TREATMENT LANDSCAPE

TOPICAL TESTOSTERONE

Black box warning – secondary exposure to testosterone

Suppression of LH and FSH (loss of fertility)

Potential for supra physiological levels of testosterone – cardiovascular

Daily application – messy to apply



TESTOSTERONE INJECTABLES AND PATCHES

Black box warning – pulmonary oil micro embolism and anaphylaxis shock

Suppression of LH and FSH (loss of fertility)

Not flexible for dose reversal

Not self applied plus needle phobia



ORAL TESTOSTERONE

In studies levels of supra physiological levels of testosterone beyond FDA limits

Suppression of LH and FSH (loss of fertility)

Twice/once daily tablet

Patient preferred oral option with no risk of transference



OTHER APPROACHES



Enclomiphene



TAK 448 –kisspeptin agonist (terminated)



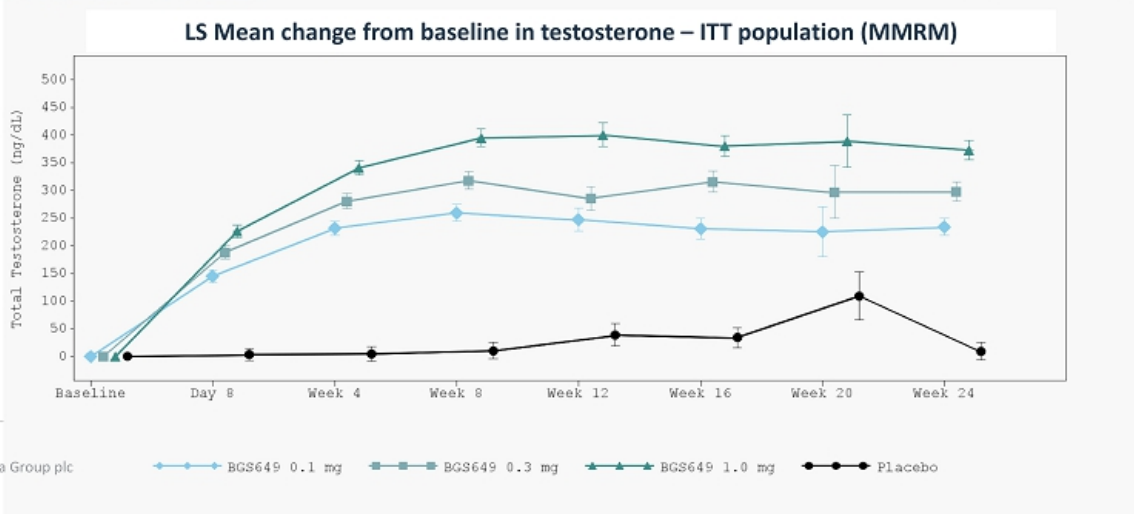
✓ BGS-649 – ORAL and OBSERVED TO RESTORE THE PATIENT'S OWN TESTOSTERONE

Once/week tablet which in clinical studies to-date has normalised testosterone levels with no observations of supra physiological levels and with normalisation of LH and FSH (fertility)

BGS-649 MET THE PRIMARY END POINT IN THE PHASE 2B TRIAL

TOTAL OF 271 PATIENTS

- **PRIMARY ENDPOINT:** normalisation of testosterone @ 24 wk in >75% subjects
 - Met at all three doses $p < 0.001$ versus placebo
 - No patient >1500 ng/dl at any time point, in the treatment groups
- **SECONDARY ENDPOINT:** normalisation of testosterone @ 24 wk in >90% subjects met in top two doses ($p < 0.001$) with 88% of subjects on low dose



BGS-649 MET THE SECONDARY END POINTS IN THE PHASE 2B TRIAL

Total of 271 patients

Mereo BioPharma 2 Ltd
Protocol No. MBG5205

Page 1 of 2
Final Unblinded 7FLs

SECONDARY ENDPOINTS

Change in fertility hormones (LH and FSH) from baseline at 24 weeks met at all three doses $p < 0.001$ versus placebo

EXPLORATORY ENDPOINTS

Improvement in total motile sperm count across all three doses versus placebo with statistical significance attained for high dose

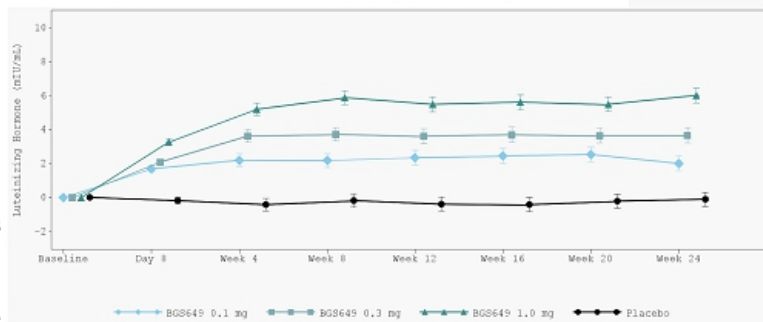
Positive trend on reduction of fatigue in the exploratory patient reported outcomes (PROs) at 8-12 weeks treatment

SAFETY

Reported to be safe and well tolerated during the study.

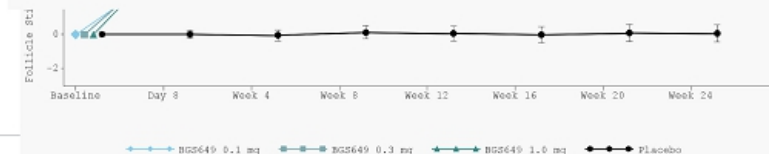
Increased incidence of elevated haematocrit levels was noted consistent with increasing testosterone levels

LS Mean change from baseline in LH in ITT population (MMRM)



Note: Least Squares Means are based on a linear Mixed Model for Repeated Measures (MMRM) with Change from Baseline as the outcome, including treatment, visit, treatment by visit interaction, baseline value and baseline by visit interaction as covariates. Baseline is defined as the last non-missing value collected before the first study treatment administration, including unscheduled assessments.

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Note: Least Squares Means are based on a linear Mixed Model for Repeated Measures (MMRM) with Change from Baseline as the outcome, including treatment, visit, treatment by visit interaction, baseline value and baseline by visit interaction as covariates. Baseline is defined as the last non-missing value collected before the first study treatment administration, including



1H 2018 MEREQO FINANCIAL RESULTS



FINANCIAL HIGHLIGHTS

Total financing raised since launch

£126 million*

- £15m (gross) placing completed in April 2017
- £20m debt facility agreed in August, 2017 fully drawn as at December 31, 2017

**(gross including debt facility)*

Novartis convertible debt balance at
June 30 2018

£2.3 million

Cash and short term deposits and short
term investments
at June 30 2018:

£36.9 million*

**unaudited balances excludes FY'17R&D tax credit
£8.2m*

R&D spend in 1H 2018

£10.9 million

(£10.5m on non-GAAP adjusted basis)

Admin Expenses in 1H 2018

£7.1 million

(£3.8m on non-GAAP adjusted basis)

Funded through to key clinical milestones

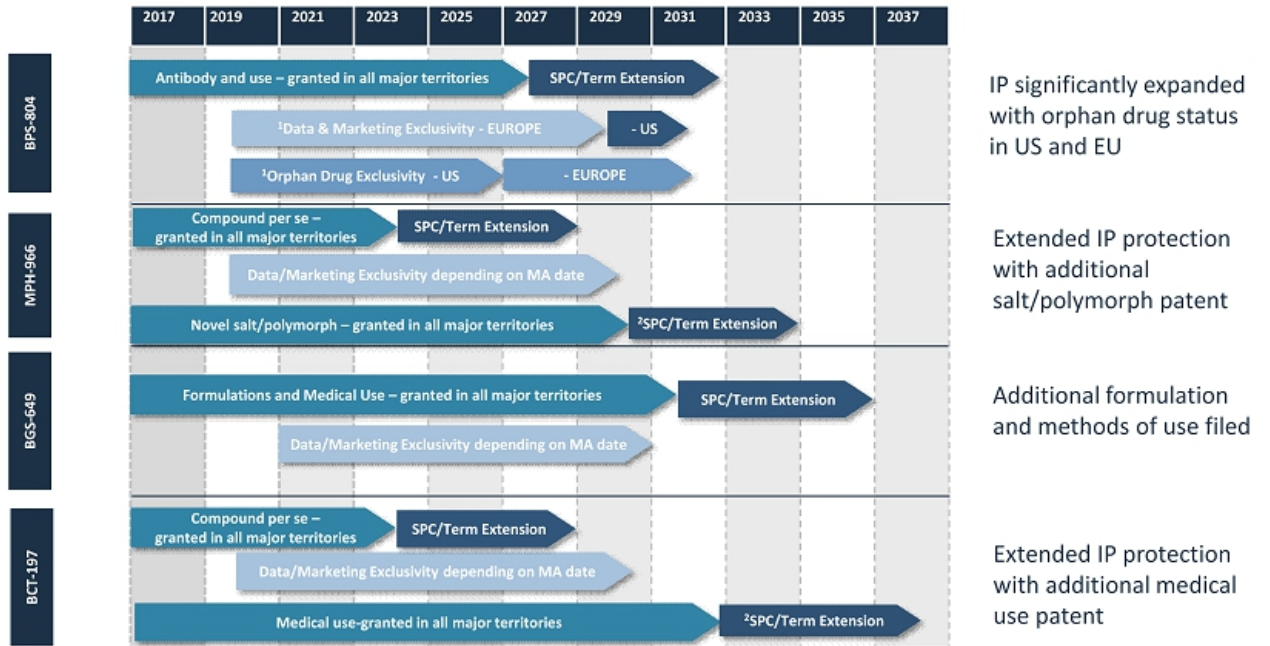




APPENDIX



ROBUST INTELLECTUAL PROPERTY PORTFOLIO



1. Assuming accelerated approval/adaptive pathway
 2. Alternative SPC extension

GUIDANCE ON TERMS OF PRODUCT ACQUISITION AND LICENSE AGREEMENTS

Transaction	Mereo Entitlement	NVS/AZ Entitlement
Licence of product in territory or worldwide	Majority percent of licensing income (upfront, milestones and royalties)	Share of licensing income (upfront, milestones and royalties)
Commercialisation by Mereo (territory or worldwide)	Product sales	Ascending tiered royalties typical for Phase 2 products and in the case of AZ cash milestones on sales
Sale of Mereo subsidiary	Proceeds from sale	Buyer steps into Mereo's shoes re (i) royalties and any milestones on any products directly commercialised by Buyer (ii) sharing any licensing income
Sale of Mereo Group	Exit for shareholders (NVS and AZ equity)	Buyer steps into Mereo's shoes re (i) royalties and/or milestones on any products directly commercialised by Buyer (ii) sharing any licensing income
Option to acquire MPH966 outright		Equity and cash milestones including successful POC study and initiation of pivotal study

ROBUST PRODUCT CANDIDATE SELECTION CRITERIA



BPS-804 (OI)

Fully human monoclonal antibody designed to inhibit sclerostin

Novartis data: Statistically significant increase in BMD in OI patients Type I, III, IV



Completed clinical studies to date:

- 83 patients have received BPS-804
- Statistically significant improvement in BMD and bone biomarkers in OI patients (P1NP, P1CP, BSAP and OC)
- Down regulation of bone resorption biomarker CTX-1 in OI patients
- Well tolerated in the target population

Day 141	BPS-804			Placebo		
Parameter	N	Ratio geometric mean to baseline	P value	N	Ratio geometric mean to baseline	P value
Bone mineral density	9	1.04	0.038*	4	1.01	0.138

* Statistical significance

Note: Trial performed on 14 patients, 9 received BPS-804 and 5 received placebo

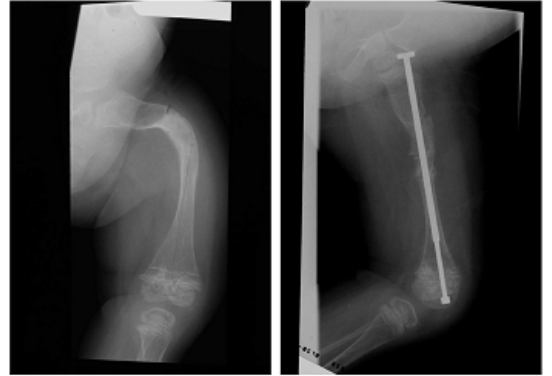
Bone Biomarkers: Procollagen I N-terminal propeptide (P1NP), procollagen C terminal propeptide (P1CP), bone-specific alkaline phosphatase (BSAP), osteocalcin (OC), Carboxy-terminal telopeptide (CTX-1)

RANGE OF SEVERITY IN OI

				Quantitative collagen defects	Qualitative collagen defects		
				Mild-moderate	Severe	Moderate	Lethal
				Non-deforming with blue sclera	Progressively deforming	Common variable with normal sclera	Perinatally lethal
				Type I	Type III	Type IV	Type II
~90% of OI (van Dijk et al. 2012. Eur J Hum Genet 20:11-19)	COL1A1	Collagen α-1 chain	AD	✓	✓	✓	✓
	COL1A2	Collagen α-2 chain	AD	✓	✓	✓	✓
	Others	Others	AR		✓	✓	✓
			XL			✓	
				~43%	~24%	~19%	~9%
~95% of all patients with OI (Martin & Shapiro. Current Osteoporosis Reports 2007, 5:91-97)							

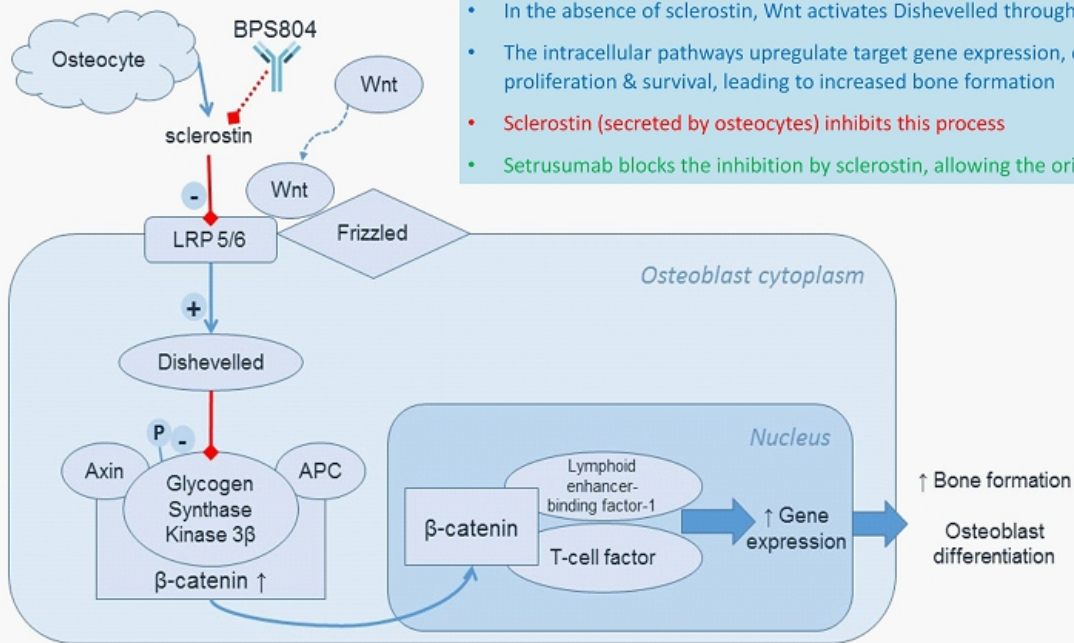
NON-PHARMACOLOGICAL TREATMENTS

- Metal rod insertion (not plates!) into long bones (since 1940s)



- Spinal fusion for scoliosis
- Physiotherapy to strengthen muscles, improve motility
- Physical aids (crutches, wheelchairs, splints, ...)
- Community support

SETRUSUMAB: MECHANISM OF ACTION



- In the absence of sclerostin, Wnt activates Dishevelled through LRP 5/6/Frizzled
- The intracellular pathways upregulate target gene expression, osteoblast differentiation, proliferation & survival, leading to increased bone formation
- Sclerostin (secreted by osteocytes) inhibits this process
- Setrusumab blocks the inhibition by sclerostin, allowing the original pathway to proceed

BPS-804: Statistical significant benefit for markers of bone mineralization

Day 43	BPS-804			Reference		
Parameter	N	Geometric mean to baseline	P value	N	Geometric mean to baseline	P value
PINP	9	1.84	<0.001*	5	1.06	0.651
PICP	9	1.53	0.003*	5	1.05	0.6
BSAP	9	1.59	<0.001*	5	0.87	0.582
OC	9	1.44	0.012*	5	0.86	0.436

* *Statistical significance*

BPS-804 (OI)- HISTORIC DATA

Fully human monoclonal antibody designed to inhibit sclerostin

Novartis data: Statistically significant increase in BMD in OI patients Type I, III, IV



Completed clinical studies to date:

- 83 patients have received BPS-804
- Statistically significant improvement in BMD and bone biomarkers in OI patients (P1NP, P1CP, BSAP and OC)
- Down regulation of bone resorption biomarker CTX-1 in OI patients
- Well tolerated in the target population

Day 141	BPS-804			Placebo		
Parameter	N	Ratio geometric mean to baseline	P value	N	Ratio geometric mean to baseline	P value
Bone mineral density	9	1.04	0.038*	4	1.01	0.138

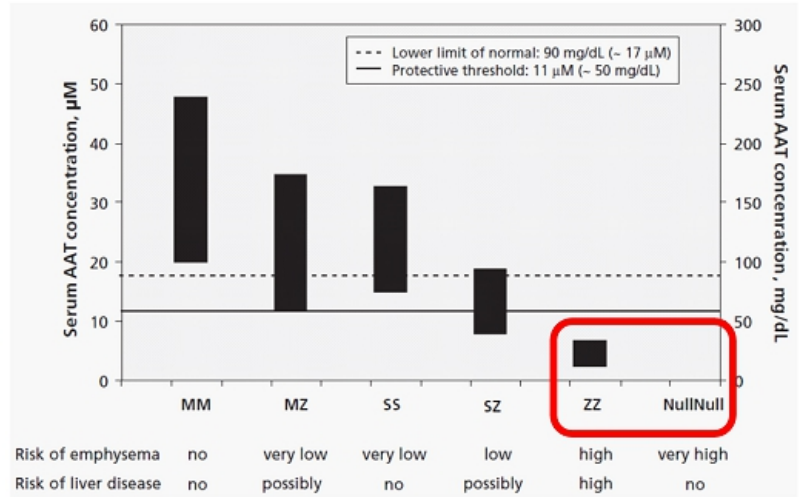
* Statistical significance

Note: Trial performed on 14 patients, 9 received BPS-804 and 5 received placebo

Bone Biomarkers: Procollagen I N-terminal propeptide (P1NP), procollagen C terminal propeptide (P1CP), bone-specific alkaline phosphatase (BSAP), osteocalcin (OC), Carboxy-terminal telopeptide (CTX-1)

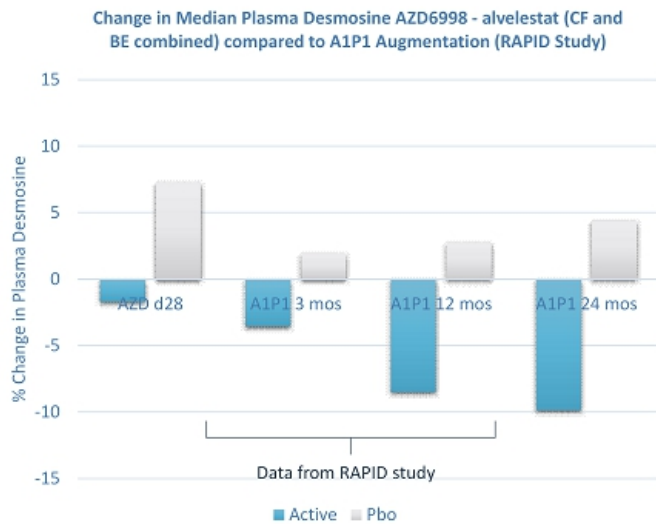
ALPHA 1 ANTITRYPSIN DEFICIENCY CURRENT TREATMENT

- Routine COPD medications
- Augmentation therapy:
 - Plasma derived alpha 1 anti trypsin
 - Weekly one hour IV infusion
 - Approval based on restoration of A1AT to a threshold level NOT clinical outcome data
 - Cost \$150k pa
 - ~9,000 patients treated
- Surgery – lung volume reduction surgery or transplant



¹Brode *et al* Alpha-1 antitrypsin deficiency: a commonly overlooked cause of lung disease. CMAJ, September 4, 2012, 184(12)

LONG TERM AUGMENTATION AND SHORT TERM TREATMENT WITH AZD-9668 –IMPACT ON DESMOSINE

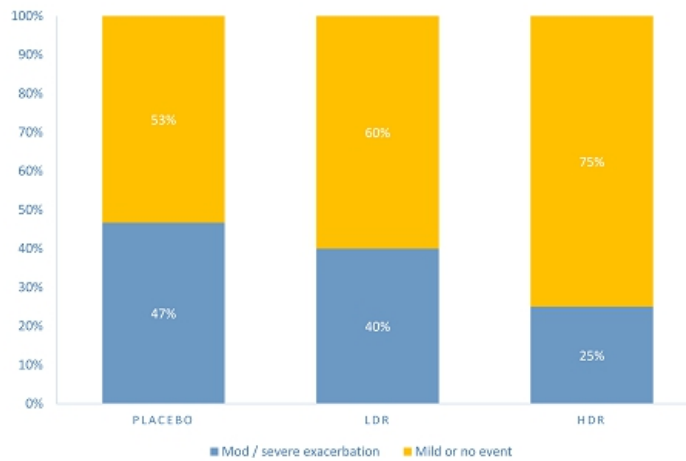


RAPID study - 2 years of augmentation in AATD patients

- Reduced loss of lung density:
 - Total lung capacity (TLC) -1.45g/l/year vs -2.19 g/l/year (P=0.03)
- Post hoc analysis demonstrated correlation in change in desmosine vs lung density (reduced desmosine – less loss of lung density)

BCT197 REDUCED THE PERCENTAGE OF PATIENTS WHO SUFFERED A SUBSEQUENT EXACERBATION IN FREQUENT EXACERBATORS

- Effect on moderate/severe exacerbations best seen in patients with ≥ 2 exacerbations / year
- Patient population with highest unmet need



BCT-197: IMPROVEMENT IN FEV1

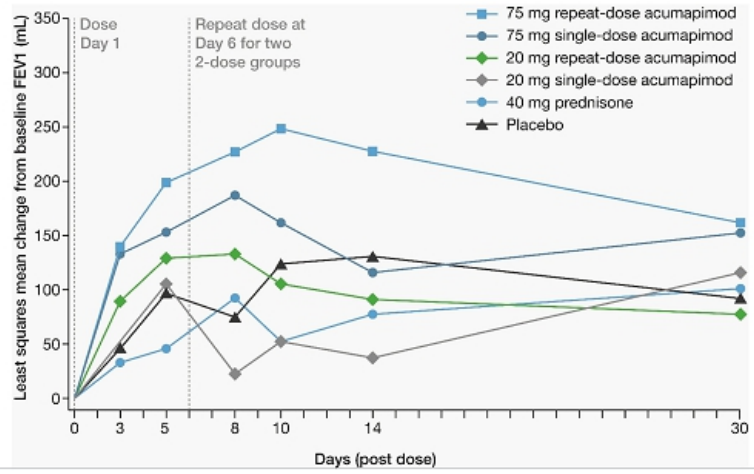
p38 MAPK inhibitor



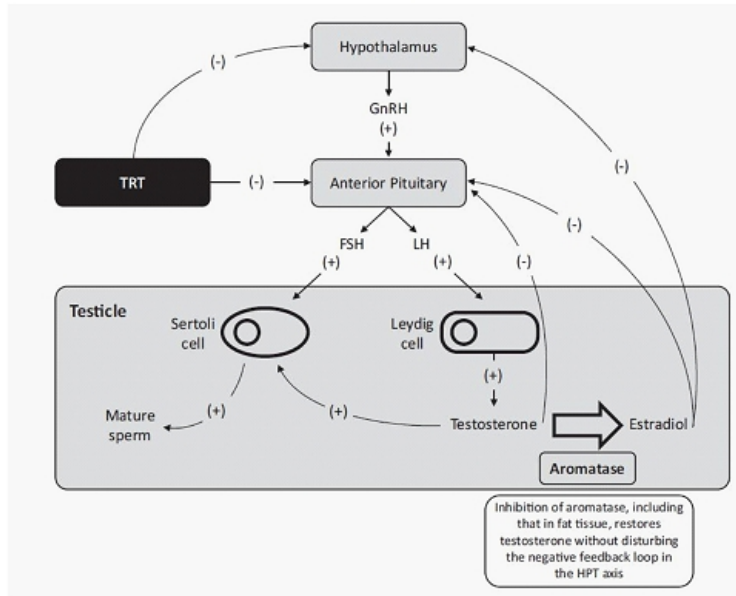
Completed clinical studies to date:

- 310 subjects have received BCT-197
- Dosed at 75mg x 2 – AUC over exacerbation period (14 days) shows a statistically significant improvement in FEV1 vs placebo and prednisolone (P=0.0198 and 0.0102)
- Well tolerated in the target population

Clinically meaningful improvement in FEV1 (>100ml) over exacerbation period



BGS-649 (HH): HPT FEEDBACK LOOP PROCESS



SUMMARY OF FINANCIAL RESULTS

FOR THE SIX MONTHS ENDED JUNE, 30 2018

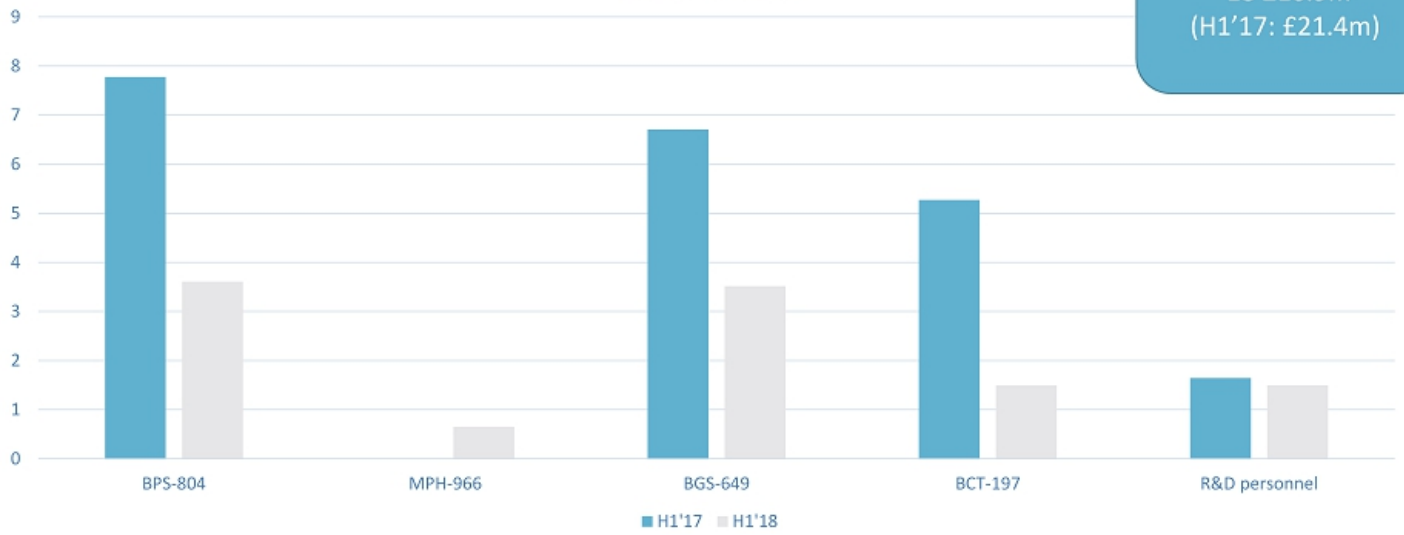
H1'18	H1'18 £'000	Share based payments £'000	Fx £'000	One off legal costs £'000	H1'2018 Non-GAAP £'000	H1'2017 Non-GAAP £'000
Development costs	(10,864)	337	-		(10,527)	(20,823)
Admin expenses	(7,102)	1,080		2,235	(3,787)	(2,982)
Operating loss	(17,966)				(14,314)	(23,805)
Finance charge	(1,386)		87		(1,299)	199
Loss before tax	(19,352)				(15,613)	(23,606)
Tax	2,365				2,365	4,546
Net Loss	(16,988)	1,417	87	2,235	(13,249)	(19,060)
EPS	24 pence				19 pence	28 pence
Net cash resources					36,912*	56,575

* Excludes FY '17 R&D tax credit due of £8.2m

R&D COSTS BY SEGMENT (£'M)

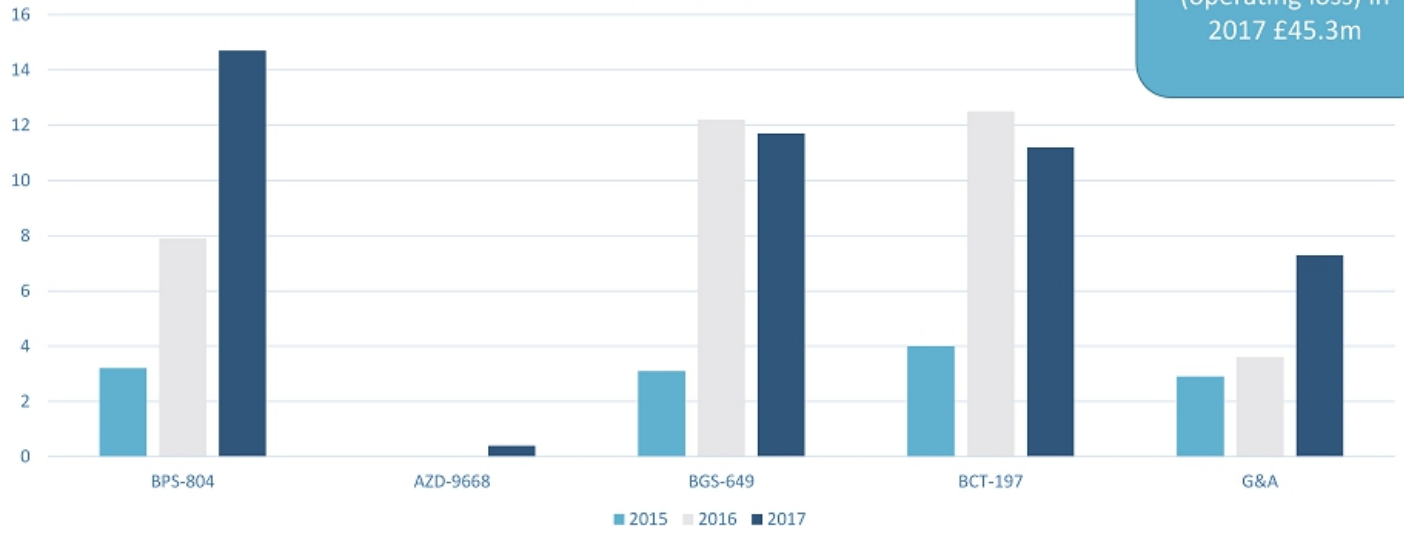
H1'17 vs H1 '18

Total R&D costs H1 '18 £10.9m
(H1'17: £21.4m)



TOTAL OPERATING COSTS BY SEGMENT (£'M)

2015 to 2017



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