pharmaxis

Creating and maintaining competitive tension

Gary Phillips CEO

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Pharmaxis has a successful track record of research, development and commercialisation of human healthcare products for the treatment and management of fibrotic and inflammatory diseases

Clinical Trials

- Utilise global experience and extensive clinical networks to execute value adding Phase 1 and 2 clinical trials

Drug Discovery Engine

- Leverage small molecule expertise and in house chemistry platform
- Efficiencies from global academic & CRO networks
- Target high value diseases with validated targets

Value Generation

- Extensive Big Pharma network
- Partnering after phase 1 or 2 to realise value and mitigate program and corporate risk

Competitive Tension Part 2

My Brief

1. How does a company build competitive tension around an asset transaction?
2. What has Pharmaxis learnt from its Boehringer deal?
3. What are common errors made by ~~inexperienced~~ deal makers?
4. How can a company be optimised for deal making?
5. How important is it to build a competitive intelligence function into your deal making process?
6. What progress is the company making on transacting a deal for its LOXL2 program? What elements add value?
7. How much does past performance or transaction history impact the ability to secure subsequent deals?

Negotiation? Auction? A Deal Maker's Guide

Harvard Business Review; Guhan Subramanian 2009

"When you have something to sell, the best way to get a good price for it is to hold an auction, conventional wisdom tells us."

"Sold, to the gentleman with the paddle."

Negotiation? Auction? A Deal Maker's Guide

Harvard Business Review; Guhan Subramanian 2009

Auction	Negotiation
BUYER PROFILE	
Number of potential buyers is large	Buyers are well known Buyers have good alternatives Difference in valuations is large
ASSET CHARACTERISTICS	
Asset can be precisely specified	Potential for value creation is large Relationship or service matters
SELLER'S PROFILE	
Speed Matters	Tolerance for risk is low
CONTEXTUAL FACTORS	
Transparency is important	Secrecy is important

Phase 1 asset considerations

Auction	Negotiation
BUYER PROFILE	
Number of potential buyers is large >10 large multinational Pharma companies interested	Companies are all well known to Pharmaxis Most have active internal research programs and are assessing both anti fibrotic and other approaches to disease management Difference in valuations is large depending on their pipeline
ASSET CHARACTERISTICS	
Phase 1 program cannot be precisely specified; no clinical proof of concept in any one of several potential indications	Potential for value creation is large; depends on therapeutic focus and portfolio options Relationship matters – yes
SELLER'S PROFILE	
Getting the right deal matters more than getting it done quickly	Tolerance for risk is low. New phase 1 programs aren't easy to find
CONTEXTUAL FACTORS	
Transparency: Continuous disclosure and commercial interests conflict	Confidentiality is important but awareness of competition is crucial

Learnings from our Licensing activities

1. Issues specific to phase 1 assets with no clinical proof of concept
   a. Independent target validation is critical
   b. In vivo disease models take on a greater importance and attract intense interrogation

2. Diligence cannot be rushed

3. The scientific team are (potentially) your best sales assets

4. People buy from people
   a. Take time to build relationships
   b. Invest in face to face meetings

Common errors?

1. Believing your own PR spin
   a. Your asset might be unique – but it still faces a lot of competition
   b. One model performed at your local university is NOT enough
   c. Your potential partners are ‘unbelievers’ but you won’t convert them by preaching

2. Forcing an unrealistic timetable for diligence
   a. Create a step by step process that builds confidence
   b. Take time to understand each company’s needs – help them as much as you can

3. Business Development people don’t make the decision to buy
   a. Build scientific relationships as early as possible
   b. Take time to coordinate the strategy with the BD and scientific teams

Optimising a company for deal making

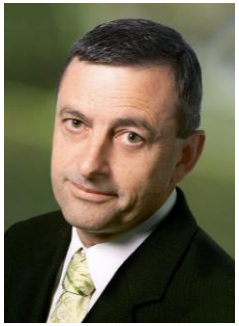
Significant experience in drug development, commercialisation and partnering

Gary Phillips – CEO

- more than 30 years of operational management experience in the pharmaceutical and healthcare industry in Europe, Asia and Australia
- joined Pharmaxis in 2003 and was appointed Chief Executive Officer in March 2013 at which time he was Chief Operating Officer
- previously held country and regional management roles at Novartis – Hungary, Asia Pacific and Australia

Dieter Hamprecht – Head of Chemistry

- previously Managing Director – Boehringer Ingelheim's research group in Milan;
- senior medicinal chemistry positions at GSK



Brett Charlton - Medical

- more than 25 years experience in clinical trial design and management
- author of more than 80 scientific papers
- founding Medical Director of the National Health Sciences Centre
- previously held various positions with the Australian National University, Stanford University, the Baxter Centre for Medical Research, Royal Melbourne Hospital, and the Walter and Eliza Hall Institute

Wolfgang Jarolimek – Drug Discovery

- more than 18 years' experience in pharmaceutical drug discovery and published more than 30 peer reviewed articles.
- previously Director of Assay Development and Compound Profiling at the GlaxoSmithKline Centre of Excellence in Drug Discovery in Verona, Italy
- spent 8 years as post-doc at the Max-Plank Institute in Munich, Germany; Baylor College of Medicine, Houston, Texas; Rammelkamp Centre, Cleveland Ohio; and University of Heidelberg, Germany

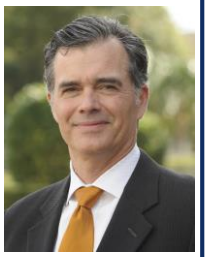
Kristen Morgan – Alliance Management

- responsibility for alliance management and medical and regulatory affairs
- more than 19 years' experience in the pharmaceutical industry having previously held a senior role in medical affairs at Sanofi-Aventis, and a commercial sales role at GlaxoSmithKline.

Relevant Non Exec Board Experience

- **Kathleen Metters**
  - former head of global research at Merck
  - CEO US Biotech Lycera

- **Simon Buckingham**
  - former President Global Corporate and Business Development at Actellion



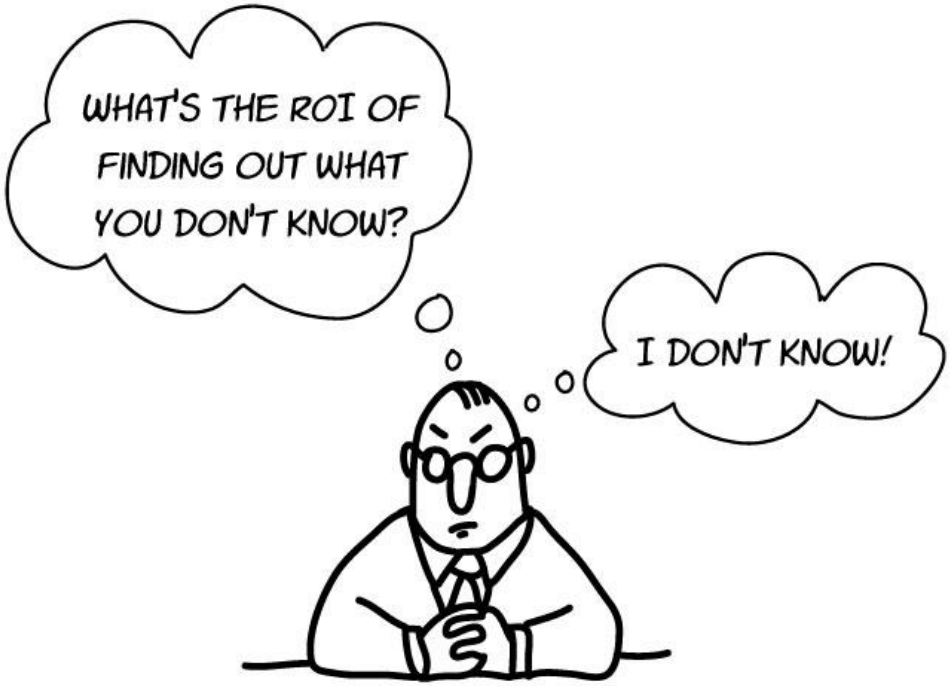
Competitive Intelligence

Why you need it

1. Directing preclinical development
   a. Which of the possible therapeutic applications are most sought after?
   b. Which disease models are considered to be gold standard?
   c. What comparators should I use?
   d. Which CRO's / research groups are most trusted?

2. Directing the pre marketing effort
   a. Which companies are active in the therapeutic area?
   b. Who has competing programs?
   c. Who has synergistic programs?

3. Supporting deal negotiation
   a. Comparator deals
   b. Historical deal structures
   c. Who is the decision maker?



LOXL2 inhibitor program

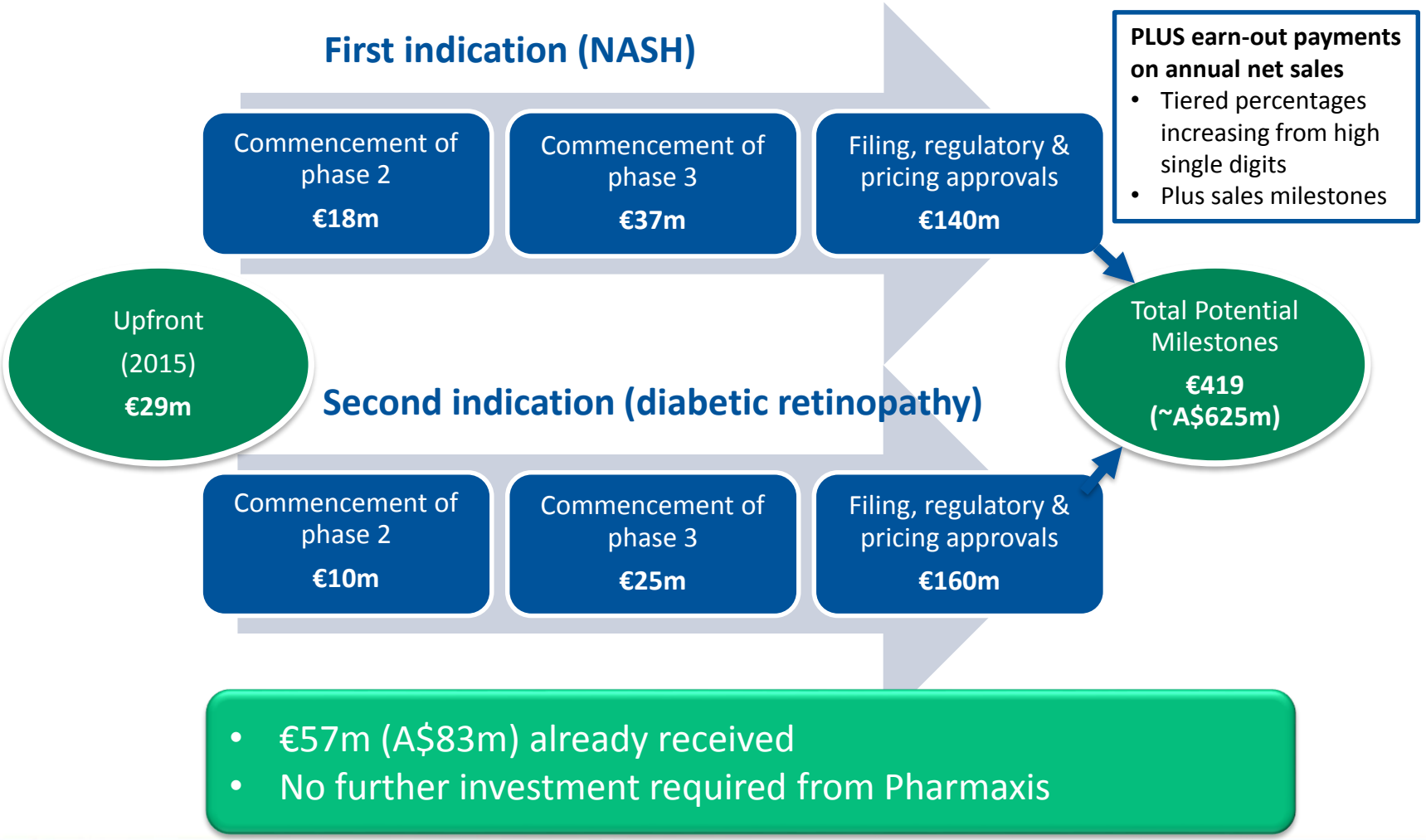
What data do you need to do a great deal for a phase 1 asset?

Feature	What Pharma values	PXS program status
Disease target	Independent validation	Multiple peer reviewed publications
Pre clinical proof of concept	2 or more different supportive animal models	Multiple supportive models across 5 different diseases. Further studies in progress
Dosing regimen	Ease of use	Oral once a day tablet or capsule
Patent	Composition of matter As long as possible	Composition of matter 2016 filing date; 100% PXS owned
Cost of Goods	Low	Small molecule with easy synthesis
# Compounds	1 plus backups	2 compounds in clinical development plus back ups
Toxicity	Wide therapeutic window As long as possible	28 day tox studies complete 13 week studies (2 species) in progress – report H2
Clinical phase	Phase 1 with target engagement Phase 2 ready	First stage for both compounds complete, proceeding to second stage – complete Q3/Q4 2018. Manufacture of drug quantities (commence H2 2018) for rapid partner start of phase 2
Target engagement	Drug inhibits target	High levels of inhibition for 24 hours from a single dose

Past Performance; does it matter?

Boehringer Ingelheim

Deal structure illustrates value generating potential of Pharmaxis business model



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Competitive Tension Part 2

QUESTIONS?

"Any questions?"