

# mariposa health

## Overview

Mariposa's main asset, TA-270, is a pharmaceutical in the critical areas of COPD and asthma. The product is in Phase 2 clinical development. Mariposa is raising funds for working capital and to acquire HI-164 from Bioxyme. The acquisition is anticipated to reposition Mariposa Health with 2 key assets in the field of COPD and asthma. Pipeline projects are present to build the company portfolio.

Mariposa Health has made considerable progress in the past year.

- ⇒ TA-270 improves lung function in COPD patients. The improvement is comparable to that of market leading products (with sales in excess of \$3billion per annum).
- ⇒ TA-270 has recently passed review by global business development of 2 major pharmaceutical companies and is continuing in the review process.
- ⇒ TA-270 is being reviewed by Chinese pharmaceutical companies, with an eye to an emerging market and a stepping stone into Asia
- ⇒ Mariposa Health has established a collaborative research venture with iRCT (Japan) to:
  - Develop an inhaled dose form of TA-270
  - Develop unique combination products of TA-270
  - Access the Japanese market
  - The collaborative venture provides access to Japanese funds that are otherwise not accessible to non-Japanese companies.
- ⇒ A key respiratory research institute has been identified for the next phase of clinical development.

A comparator company, Mimetica, has a single project currently entering Phase 2 (i.e. less advanced than TA-270), yet has been given a pre-money value at listing of \$18m.

Our aim is to place Mariposa in as strong a position as possible before listing in what today remains a weak market for small cap companies.



## Investment proposal

Step 1. Group	# shares (m)	Share price (cps)	Valuation (\$m)
Current shares (fully diluted)	39	16.5	6.4
Round C	3	16.5	0.5
Total	42	16.5	6.9

Purpose of Round C funds:

1. Deal discussions with several pharmaceutical companies
2. Design and set-up for Phase 2 clinical trials of TA-270 and HI-164
3. Acquisition of HI-164

Step 2.

Listing at a valuation determined by the ongoing activities in Step 1, in particular whether a deal is completed and how advanced we can move with the set-up of clinical trials.

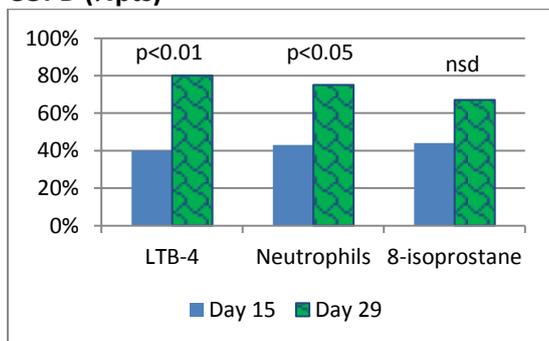
### TA-270

TA-270 is a pharmaceutical in Phase 2 clinical development for chronic obstructive pulmonary disease (COPD). It is available as an oral tablet and is also suitable for an inhaled formulation.

An exploratory Phase 2 clinical trial of TA-270 in patients with COPD showed:

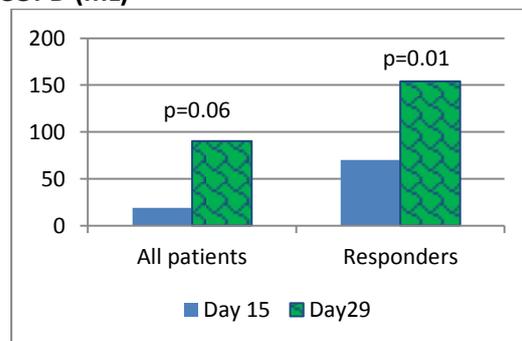
- TA-270 has unique protective modes of effect
- That the clinical benefits of TA-270 are associated with its effects on targeted biomarkers. This provides the possibility to target TA-270 to those patients who gain the most benefit
- Lung function is improved by 154mL in patients exhibiting a reduction in either of two key biomarkers (LTB-4 and 8-isoprostane) (see Figure 1)
- The effect on lung function is equivalent to that achieved by market leader Spiriva (see Figure 2).

**Fig.1a. TA-270 inhibition of biomarkers in COPD (%pts)**



\*p-value; Day 28 vs Day 15

**Fig.1b. TA-270 increases FEV1 in patients with COPD (mL)**

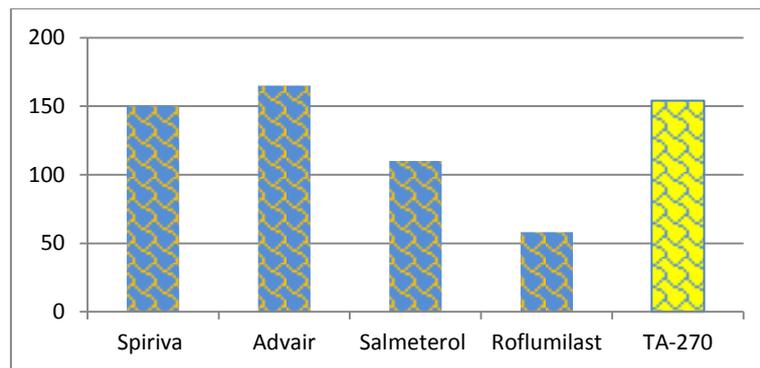


\*p-value; Day 28 vs Baseline

In an exploratory Phase 2 clinical trial, TA-270 was shown to improve lung function (FEV1) to an equivalent amount as market leaders Spiriva and Advair (Figure 2). These market leaders have sales in excess of \$10billion each year.

The clinical effect of TA-270 is closely associated with its effects on biomarkers, and clinical effect can be seen after 28 days of treatment.

**Figure 2.** Change in lung function (FEV1) caused by TA-270 and market leading drugs in patients not taking other chronic COPD medication (mL)



Source: TA-270 data on file, FDA approved information, publications

## HI-164

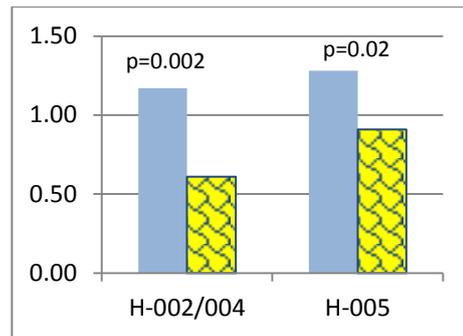
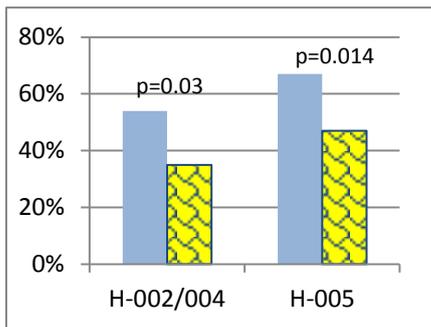
HI-164 is an oral vaccine to prevent exacerbations of COPD caused by bacterial infections of *H. influenzae* and similar organisms.

Bioxyn’s share price collapsed last year. Wasn’t it a failed clinical trial? What did we learn from past trials?

In each of the past Phase 2 clinical trials, H-002/004 and H-005, HI-164 provided clinical and statistical benefits:

- Patients under 65 years of age responded better than those over 65years and females responded better than males
- In Studies HI-002/004 and HI-005, there were statistically significant reductions in:
  - The number of patients having exacerbations (35% & 30% benefit)
  - The number of exacerbations per patient (40% & 29% benefit) (Figure 3)

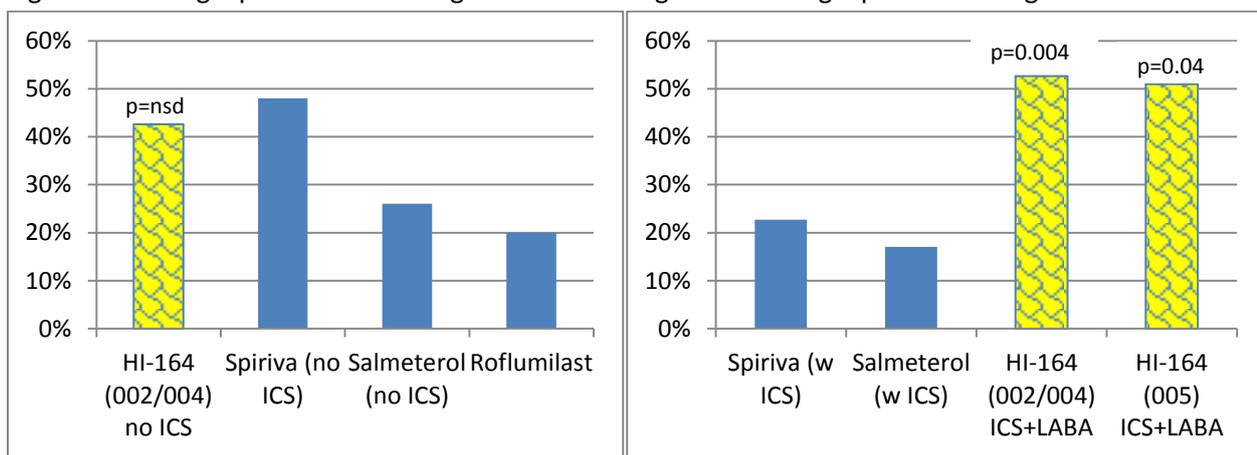
Figure 3. Reduction on the episodes of COPD in patients (excluding males aged 65 years and older)  
 Fig. 3 a) Patients having new episodes of COPD (%)    b) Average number of episodes of COPD per patients (n) (HI-164 patterned; placebo solid colour)



A comparison between the effects of HI-164 and marketed drugs can be seen when reviewing the effects on patients either with or without background medication. In both cases, the effect of HI-164 to reduce exacerbations is similar or superior to market leading drugs (Figure 4). This result is particularly impressive because it has been seen in 2 separate clinical trials in 300 patients.

**Figure 4** Reduction in the number of exacerbations of COPD per patient caused by HI-164 and market leading drugs (% reduction in exacerbations).

Figure 4a Amongst patients not taking ICS or LABD Figure 4b Amongst patients taking ICS or ICS & LABD



ICS= inhaled corticosteroid; LABD= long-acting bronchodilator



### Bid for HI-164

Acquiring HI-164 would provide Mariposa Health with 2 major products in Phase 2 clinical development. TA 270 and HI-164 act on different medical aspects of COPD and asthma, and both have unique benefits over existing treatments. The combination of these two assets would make Mariposa Health an attractive partner for pharmaceutical companies and research institutions, and provide an attractive listing opportunity.

- ⇒ Our relationships developed with TA-270 could facilitate uptake of HI-164 by development and commercial partners across multiple territories.

## Board & Management

### Board of Directors

In November Ian Mutton resigned from the Board of Directors and in February this year Tony Ho resigned due to potential conflicts with other Board duties.

Ian & Tony were both critical during the start of Mariposa Health and I thank them for their contributions.

Current Board:

Executive Chairman - Phillip Comans  
Non-executive director - Kevin Lynn  
Company Secretary & CFO - Robert Lees

### Management & Advisors

Our managers in Tokyo, Dr Yasuo Aoki and Mr Koichiro Koike have worked well on business development activities in relation to radiation protection and the formation of our collaborative partner, iRCT Pty Ltd. Submissions have been made for Japanese government funding of local projects.

We have recently engaged Mr Stuart Turner for corporate advice and Dr Yang Li (Sydney-based Chinese national) as a primary advisor for Chinese collaborations. The conditions of engagement are associated with future returns rather than immediate fees.

### Patent status

We have 4 patents covering TA-270 granted in all major international territories, excepting the US where 3 patents are granted and one is pending. This provides strong patent coverage for TA-270. The activities associated with iRCT Pty Ltd is aimed to increase the patent protection around the TA-270 franchise.

### Financial status

The Financial Report for the year ending June, 2013 will be available shortly. In the past 12 months the company has been funded by loans from directors that are convertible to shares either at listing or at a time to be agreed. Opportunity occurred to accept funds at severely dilutive levels and these opportunities were rejected.

The company chose instead to fight through on starvation rations. The low cost actions taken included:

- A more thorough evaluation of our clinical data-set
- Commencing focused business development activities
- Releasing skills in Japan to create new funding and development opportunities.

I believe that choices made were the right choices for building the business and providing the best likelihood of substantial return on investment for shareholders. I will be seeking shareholder support in the next phase, fully understanding the patience you have held so far.

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