Medical Developments Int Ltd (MVP)

Scoresby site visit and meeting with Management

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Summary

Medical Developments International (MVP) has three operating segments:

- Pharmaceuticals (59% of FY18 sales) - is engaged in the manufacture and sale of the Penthrox "green whistle" emergency pain relief device and methoxyflurane drug;
- Medical Equipment ("Space Chambers" and other asthma / respiratory care devices)(37% of sales);
- Veterinary Equipment (4% of sales).

The two main segments are both undergoing strong international expansion.

We forecast Penthrox sales to go from $8.1m in FY18 to $126m for the 38 approved countries to date, under a 12 year roll out scenario. Approvals to be sought in a further 50+ countries including the USA, China and Russia could take this to $260m of annual sales (not in our forecasts).

What has changed?

- In July 2018 MVP's clinical trial program for getting Penthrox approved for the USA was put on "clinical hold" by the FDA with MVP receiving a letter outlining the FDA's concerns and issues.
- MVP now has a meeting scheduled with the FDA this month, where it hopes to satisfy the FDA's questions with additional information and explanations to try to get the program restarted. MVP fully expects that a further Phase 2b trial will probably be required.
- The US has clear potential to be the biggest and most appropriate market for Penthrox, given its advantages over competing opioid pain drugs, in the context of major opioid addiction problems in the country.
- We value the US opportunity for Penthrox at A$100m or ~$1.50 per share. We increase our risk probability from 40% to 50% based on Penthrox now having sold 6 million doses worldwide, and UK and France launches now 41 and 28 months in without any safety issues. We understand that MVP also has new interim clinical data for its Post Authorisation Safety study (PAS) in the UK for 500 of the planned 1,000 patients.
- Interim Profit results were below our expectations with both Penthrox and Asthma Devices each $0.4m lower than our forecast at the Ebitda level. We lower our revenue forecasts by 10% for each of FY19/20/21, and NPAT by -21%/ -16% / -26%.

Recommendation – 12-mth Price Target $6.40

We maintain our Accumulate recommendation for the long-term growth potential of a global roll-out of Penthrox. Our 12-month price target is $6.40 (was $5.70) based on our updated Sum of the Parts / DCF valuation. This assumes a 50% risk weighting on the US opportunity (previously 40%) and 40% on China. Our unrisked valuation is $8.60 / share.

Recommendation	Accumulate
Risk Rating	**High**
12-mth Target Price (AUD)	**$6.40 (was $5.70)**
Share Price (AUD)	$5.22
12-mth Price Range	$3.48 - $6.17
Forecast 12-mth Capital Growth	22.6%
Forecast 12-mth Dividend Yield	0.8%
12-mth Total Shareholder Return	**23.4%**
Market cap ($m)	342.0
Net debt (net cash) ($m)(Jun 19e)	(18.3) (net cash)
Enterprise Value ($m)	323.7
Gearing (Net Debt/ Equity)	N/a – Net cash
Shares on Issue (m)	65.5
Sector	Healthcare
Average Daily Value Traded ($)	$561,000
ASX 300 Weight	n/a

Financial Forecasts & Valuation Metrics

Years ending Jun $m	17(a)	18(a)	19(e)	20(e)	21(e)
Sales revenue	18.3	17.5	21.2	25.6	30.9
Sales growth	19%	-5%	21%	21%	21%
EBITDA	3.8	2.2	3.6	4.9	6.4
NPAT	1.8	0.2	1.2	1.8	2.2
EPS (cents)	3.1	0.4	1.8	2.8	3.3
EPS growth	16%	-87%	344%	51%	20%
DPS	4.0	4.0	4.0	4.0	4.0
P/E	166.2	1,266.9	285.1	188.9	157.4
EV/Ebitda	80.8	142.8	89.8	67.4	53.7
Yield	0.8%	0.8%	0.8%	0.8%	0.8%
Franking	100.0%	100.0%	100.0%	100.0%	100.0%
Net debt / equity	Net Cash	40.2%	Net Cash	Net Cash	6.9%

Source: PhillipCapital estimates

MVP SHARE PRICE PERFORMANCE

Update with CFO

We recently visited MVP's Scoresby offices and met with Mr Mark Edwards, the CFO for a general update.

Key points from our meeting and discussions are as follows:

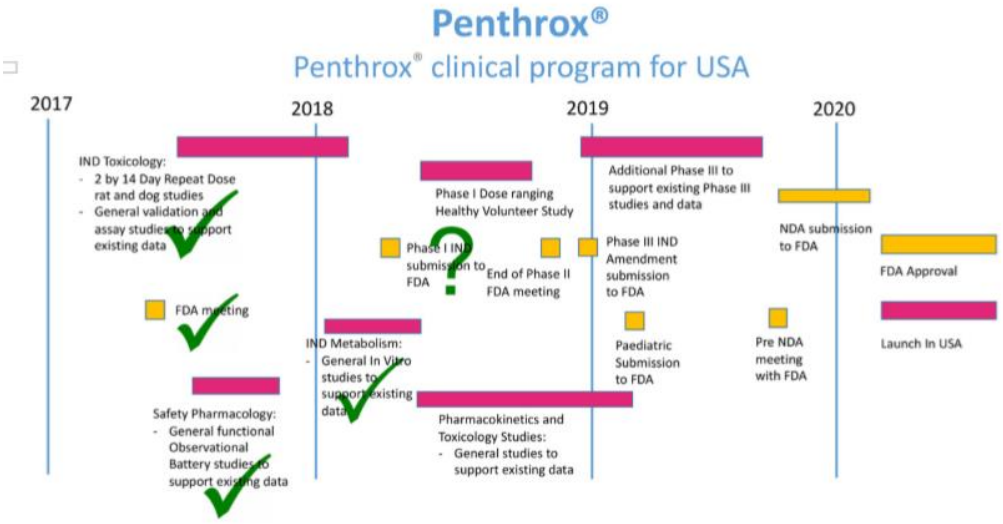
Pharmaceuticals Division (Penthrox)

- Regulatory issues regarding Brexit have delayed some of the European country launches for Penthrox. The original European approval was granted by the MHRA in the UK, and was held by a UK subsidiary of MVP. Due to Brexit issues, this had to be moved to Ireland.
- The Penthrox market launches in Germany and Spain are now expected in early 2020, with Spain shortly after – a 6-12 month delay.
- It is now clear that new country launches take at least 3 years to generate meaningful sales volumes. The UK launch is now 3+ years in (commenced Jan 2016) and is still ramping up. There is a big lag between gaining marketing approval in a country, and getting listed on hospital formularies – initially for Accident & Emergency department use, and potentially later for other hospital departments (eg. The cancer ward).
- MVP's distributors have learned from this, and are now ordering in smaller but more regular quantities. This also helps MVP to plan production runs more efficiently.
- The UK / Ireland have now done 6 orders in 3 years.
- Launch orders for 8 new European countries including Germany and Spain were filled in the first half. MVP sells Penthrox "ex-factory" so these initial orders count as sales for MVP even if they have not yet been on-sold by the distributors (sitting in their inventory).
- MVP has now sold over 6 million doses in over 30 years, with less than a dozen adverse events – and some of these were attributed to intra-drug reactions, not necessarily to Penthrox.
- **Clinical Studies/ Regulatory** - The PK study (Pharmacokinetic study – which characterises how the drug moves through the human body; 56 patients in Europe) has been completed and the PAS study in the UK (Post Authorisation Safety Study) finishes recruitment of 1,000 Penthrox patients in August. Final data should be available a couple of months later. Interim data for the first 500 patients has already been received, and has been passed on in an updated dossier to the US FDA. NB These results have not yet been released to the market but we presume they are consistent with prior studies and positive.
- **US application process** - The CEO, the Head of Regulatory Affairs and two experts will meet with the FDA this month (June). MVP hopes to convince the FDA to allow the Penthrox IND approval process to restart. MVP fully expects that further clinical trials will be required by the FDA, and possibly further animal studies. MVP expects the total US approval costs to be approximately US$15m and has already spent approximately US$4m to date. MVP expect this process, if restarted, will take approximately 2-3 years. We show a diagram of MVP's previous planned timetable for getting US approval on the next page. Obviously this has now changed.

  Background: The clinical trial program for Penthrox to seek approval for the USA was put on "clinical hold" by the FDA in July 2018, causing the share price to tumble by approximately 39% from $5.85 before the announcement on 25/7/18 to a 2018 low of $3.55 in August 2018. MVP shares have since recovered most of that fall, but are still 11% lower than before the announcement. Therefore we think

the share price could bounce a further ~10% or so should the US IND application process be allowed to restart. The All Ordinaries index (XAO) is also 4.0% higher since that date (6619 points vs 6366 points).

- **The US has an estimated 140m Accident & Emergency department addmissions per annum**. A proportion of these would be highly suited for Penthrox (eg. Car accidents, gun shot wounds, broken bones, dislocations, bad sprains etc). Our modelling for the US assumes a potential peak penetration of 1.5% of the US population, or approximately 5.0m units per annum. This would be equivalent to 3.6% of the 140m A&E admissions. The USA is probably MVP's biggest and most attractive market opportunity. Potential drug reimbursements and ability to pay for treatment are also very favourable.



- **Mexico** – MVP has recently signed a new distribution partner. Expected launch in early 2020. Pricing similar to UK & Europe.
- **New inhaler device program** – we were shown a prototype of the new Penthrox device. Work continues on it. The objective is to eliminate having to manually load the small glass vial containing the drug for easier self-administration. The current device is clunky not very convenient in the military battlefield or trauma situation. Designing a new device is also tricky because the methoxyflurane generic drug is volatile and storage in certain materials only. MVP hopes the chosen new device(s) can be launched within 3 years.
- The added benefit of a new device is that it can potentially be patented giving MVP some new IP protection for 20 years.
- The current device is manufactured in Taiwan. A second supplier will be added in due course as international volumes ramp up.
- The methoxyflurane drug is manufactured here at Scoresby and at the older site at Springvale Melbourne. (It is a generic drug, so not patented. However the manufacturing process is a trade secret). See further comments on manufacturing in the "Site Visit" section at page 5.
- **New "Continuous Flow" manufacturing technology developed with CSIRO** - MVP is "sharing" results of its continuous flow drug manufacturing technology with interested large pharmaceutical manufacturers. MVP is proceeding with patent applications to use the technology to make Lidocaine (numbing drug commonly used by dentists), Diclofenac (Voltaren – pain and anti-inflammatory drug) and potentially some other large volume drugs. MVP owns the technology and is likely to licence the technology to other companies. Timing unknown (presume waiting for the patent process). MVP's CEO John Sharman was quite excited by the potential of this technology at the AGM last year.

Medical Equipment Division (Asthma Devices)

- MVP's asthma spacer products are now carried by approximately 13,000 of the 65,000 pharmacies in the US.
- MVP's product competes very well with the rival "Aero" product at similar price points. The MVP product is fully reimbursable whereas the competing products are not. The US respiratory market is a big opportunity for MVP.
- There is no cross promotion of asthma devices into the Penthrox customer base or distribution channel partners currently.
- Competitors are "Aerochamber" in the US, and "Able" in Australia.

Veterinary Devices

- MVP offers a range of products in the areas of pain management, asthma and resuscitation. Products are hand-assembled and tested here at Scoresby.

Scoresby Site Visit

We recently visited MVP's Scoresby offices and manufacturing facility for the second time. The leased facility covers approximately 4,000 square metres including the MVP office. MVP has 60 full time equivalent staff comprising 54 here and 6 at Springvale (none overseas).

The new facility was designed and fitted out by MVP with excess capacity to handle a large increase in expected volumes as the international roll-out of Penthrox gathers pace, especially in Europe.

However MVP is also still making small batches at the old Springvale leased site (20-40 litre batches at a time) and is also making larger batches with the new "continuous flow" technology at Scoresby (80-90 litre batches at a time).

So MVP is not yet deriving the cost benefits of the new production method developed with CSIRO, and in fact has higher costs as it is running two facilities. Apparently the rent on Springvale is quite small, and MVP intends to keep it for some time to come for small batches and flexibility.

Production is currently 1 shift per day, and some days there is no Penthrox production required. Many of the staff are casuals.

A new temperature controlled finished goods storage area was being added within the warehouse building at the date of our visit (23/5/19). This can hold 50 pallets.

The new facility is modern and quite large. The specialised fit out cost about $4.5m here (plus $1.0m at Springvale). Specialised air-handling equipment must run 24 hours per day to maintain a constant temperature.

The key drug manufacturing and device assembly section are "clean room" environments so we were not allowed to go in, though viewing windows gave us some idea of the operation. There are some photos in the FY17 annual report.

Key raw materials (chemicals) come mainly from China.

The TGA inspect the facility every year. In addition, key customers do their own quality and risk audits regularly.

5-600 solar panels were added last year saving approximately 50% on electricity costs, including selling surplus power back into the grid.

However MVP's insurance premiums have sky-rocketed.

Overall, we liked what we saw, and it is certainly a much more impressive facility to take potential customers to than the old Springvale site which we have also seen.

Interim Results Review

MVP reported a net profit after tax of $0.1m for the six months ended December 2018, approximately flat on the pcp. This was $0.5m below our forecast.

However this result masks solid underlying progress in the international roll-out of Penthrox.

Key points are as follows:

- Group revenue up 22% to $9.5m. A creditable performance, although $1.2m (11%) below our forecast.
- Group ebitda $1.2m up +$0.4m (42%), although $0.5m (29%) below our forecast.
- Group ebitda margin 13.0% (v 11.2%), below our forecast of 16%.

Performance by Product area

- Penthrox revenue $6.4m up +33%. Ebitda $2.5m up +$260k (+12%). Ebitda margin 39.4% which was lower than the 47% pcp as international sales through distributors pick up.
- Asthma Devices sales $2.8m +2%. US sales were up 136%, but were offset by UK / European sales being down -61% as a result of a major pharmacy deal being delayed (MVP still negotiating). Ebitda improved to a small positive of $0.1m, +$97k (previously a small loss). The Ebitda margin was slim at 2.6% (v -0.9%) which was well below our expectation of 12.5%. This was caused by lower margins on international sales through distributors and the delayed sales in UK / Europe.
- Veterinary device sales were $0.4m +20%. Ebitda of $0.1m was down -$12k. The Ebitda margin was 33.3% (v 44.8%). The volatility reflects customer order patterns which should even out over a longer period.
- Unallocated costs were $1.5m, down $26k or -2%.
- Capitalised R&D costs were $4.3m (v $3.7m) (see below).

Geographical Breakdown

- Australia revenue flat at $4.8m. Since then, MVP has appointed Mundipharma as its new exclusive Australian distributor for Penthrox (excluding Ambulance which MVP will continue to do itself).
- New Zealand revenue $0.5m +16%.
- International revenue $3.0m, up $1.4m or 95%. With Asthma Device sales up 6% WW, the bulk of this was increased Penthrox sales.
- Note, MVP does not disclose a geographical break-down of Ebitda or NPAT at this stage.

Cash Flow

- Cash from operations was a stunning $22.8m (v $1.5m) due to $20.8m of up-front licence payment (non-refundable) being received in the period from Daiichi Sankyo for China, Thailand and Vietnam rights for Penthrox.

Investing cash flow included:

- Payments for plant & equipment of $1.0m (v $1.5m).
- Payments for capitalised R&D of $4.3m (v $3.7m). This comprises new country product registration costs and clinical trial costs.

Financing cash flow

- This included $24.7m proceeds from the institutional share placement ($17m, August 2018) and SPP ($7.5m, September 2018), both done at $4.00 per share.

Balance Sheet

- MVP finished the period with net cash of $32.0m (v $8.5m net debt at June 2018), a massive $40.5m turnaround due to the $24.7m capital raising at $4.00 per share, and the $20.8m up-front licence fee received in November.
- Capitalised intangibles were $26.2m (v $22.5m) up $3.6m due to a further $4.3m being expended on market launches and R&D, less amortisation of previously capitalised amounts.

Medical Developments (MVP) 6 months ended Dec $m	1H18A $m	1H19A $m	Change	Phillip Capital e $m	Better (Worse) than Est
Net Revenue	7.8	9.5	22%	10.7	-11%
Cost of Sales	-2.2	-3.2	46%	-2.9	11%
Gross Profit	**5.6**	**6.3**	12%	**7.8**	-19%
Gross Profit margin	71.5%	65.9%		72.6%	
Cash Operating Costs	-4.7	-5.0	7%	-6.0	-17%
Ebitda	**0.9**	**1.2**	**42%**	**1.7**	**-29%**
Ebitda margin	11.2%	13.0%		16.2%	
PBT	**0.118**	**0.186**	**58%**	**0.8**	**-77%**
Tax Credit (Expense)	0.009	-0.054		-0.2	-75%
Tax rate	7.6%	-29.0%		-27.5%	
NPAT	**0.127**	**0.132**	**4%**	**0.6**	**-77%**
EPS	0.22	0.21	-2%	0.91	-77%
DPS	2.00	2.00	0%	2.00	0%
Operating cash flow (incl Up-fronts)	1.5	22.8	1392%	23.7	-4%
Net Cash (Debt)	3.0	32.0		33.0	-3%
SEGMENTAL					
Revenue					
Penthrox	4.8	6.4	33%	6.6	-3%
Asthma Devices	2.7	2.8	2%	3.8	-27%
Veterinary	0.3	0.4	20%	0.3	9%
Total	**7.8**	**9.5**	**22%**	**10.7**	**-11%**
Ebitda					
Penthrox	2.2	2.5	12%	2.9	-14%
Asthma Devices	0.0	0.1	-404%	0.5	-85%
Veterinary	0.1	0.1	-10%	0.1	-15%
Unallocated	-1.5	-1.5	-2%	-1.8	-18%
Total	**0.9**	**1.2**	**42%**	**1.7**	**-29%**
Ebitda Margins					
Penthrox	47.1%	39.4%	-16%	44.1%	-11%
Asthma Devices	-0.9%	2.6%	n/a	12.5%	-79%
Veterinary	44.8%	33.3%	-26%	42.8%	-22%
Unallocated	-19.0%	-15.3%	-19%	-16.6%	-8%
Total	**11.2%**	**13.0%**	**17%**	**16.2%**	**-19%**
Geographical Revenue					
Australia	4.8	4.8	-0.1%	4.9	-3.1%
New Zealand	0.5	0.5	16%	0.5	13%
International	1.6	3.0	95%	5.8	-48%
Total	**6.8**	**8.3**	**23%**	**10.7**	**-23%**
Aust & NZ combined	5.2	5.3	1.3%	5.4	-1.7%

Source: Company, Phillip Capital estimates

Changes in Estimates

We have lowered our revenue forecasts by approximately 10% for FY19, FY20 and FY21.

We have lowered our NPAT forecasts by 21% for FY19, 16% for FY20 and 26% for FY21.

This reflects delays in the Penthrox country launches in Germany and Spain (now expected early 2020) and Italy (after Germany & Spain), approximately a 6-12 month delay in getting country specific marketing approvals.

We have lowered our Ebitda margin assumptions for Asthma Devices from 12.5% to 7.5% to allow for a higher proportion to go to the international distributors than before. This results in a dramatic 53-63% reduction in the ebitda line for this division. This business is expanding its unit sales volumes dramatically in the US via international distributors into large pharmacy chains (US sales +136%, but UK/ Europe down 61% in 1H19). The margin situation is not clear to us at present so we wanted to build more caution into our forecasts. We are forecasting revenue growth of 5% this year, 10% in FY20 and 15% in FY21 as the new distributors gain further traction in pharmacy chains.

We lower our margin assumption on Veterinary Equipment to 30% from 33% to be more conservative. There is little R&D investment in this business, so we are slightly concerned that the high historical ebitda margins might not be sustainable. It is however a niche market and MVP has one of the leading brand names.

Our Sum of the Parts / DCF based 12-month price target increases by 12% due to a higher probability assessment on the Penthrox US opportunity (50% instead of 40%), slightly higher growth rate for Australia reflecting the appointment of Mundipharma as the new distributor, slightly lower Unallocated costs and a lower discount rate (10.0% instead of 10.5%).

Medical Developments (MVP)	FY19e			FY20e			FY21e		
Changes in Forecasts	**Old**	**New**	**Change**	**Old**	**New**	**Change**	**Old**	**New**	**Change**
Revenue $m	23.4	21.2	-9.5%	28.6	25.6	-10.4%	34.1	30.9	-9.5%
Revenue growth	34%	21%	-12.5%	22%	21%	-1.0%	19%	21%	1.3%
Ebitda	4.0	3.6	-10.7%	5.8	4.9	-15.1%	8.3	6.4	-22.5%
Pre-tax profit	2.1	1.6	-21.2%	3.0	2.5	-15.6%	4.1	3.0	-26.3%
NPAT (normalised) $m	**1.5**	**1.2**	**-21.2%**	**2.2**	**1.8**	**-15.6%**	**3.0**	**2.2**	**-26.3%**
EPS (norm) cents	**2.3**	**1.8**	**-21.2%**	**3.3**	**2.8**	**-15.7%**	**4.5**	**3.3**	**-26.4%**
DPS cents	4.0	4.0	0.0%	4.0	4.0	0.0%	4.0	4.0	0.0%
Tax charge (%)	27.5%	27.5%	0.0%	27.5%	27.5%	0.0%	27.5%	27.5%	0.0%
Shares on Issue (Wavge)	64.9	64.9	0.0%	66.2	66.3	0.2%	66.2	66.3	0.2%
12-mth Price Target				5.70	6.40	12%			

Source: Phillip Capital estimates

Medical Developments (MVP)	FY19e			FY20e			FY21e		
Changes in Forecasts	**Old**	**New**	**Change**	**Old**	**New**	**Change**	**Old**	**New**	**Change**
Ebitda - Penthrox	6.1	6.0	-2.0%	8.3	7.6	-8.5%	11.3	9.3	-17.4%
Ebitda - Asthma Devices	1.1	0.5	-53.8%	1.4	0.6	-60.0%	1.7	0.6	-62.1%
Ebitda - Veterinary	0.3	0.2	-17.0%	0.3	0.3	-12.8%	0.3	0.3	-8.4%
Unallocated costs	-3.5	-3.2	-9.5%	-4.1	-3.5	-15.0%	-5.0	-3.8	-23.3%
Ebitda - Group	**4.0**	**3.6**	**-10.8%**	**5.9**	**4.9**	**-16.4%**	**8.3**	**6.4**	**-22.7%**

Source: Phillip Capital estimates

Valuation & Recommendation

MVP looks very expensive on near term price earnings and EV/ sales multiples, compared to other medical device and pharmaceutical stocks. Also, it is difficult to find a good comparison for MVP.

MVP's current modest level of profit has little relevance to its 5-10 year future earnings potential, as the Pharmaceutical segment (Penthrox) is in the early stages of a 38+ country geographic expansion. Also the Medical Equipment segment (Asthma Devices) has only recently gained US FDA approval and listings in >15,000 US Pharmacies including WalMart, Kmart, Costco, Price Chopper, Sam's Club and Independent Pharmacy CoOp. So we consider a P/E based valuation is not appropriate at this early stage of the company's international development.

DCF / Sum of the Parts Valuation

We have valued MVP using a discounted cash flow method, and broken this down further into a sum of various components.

- We have chosen to value the US and China opportunities separately, so investors can consider the likelihood of MVP getting regulatory approvals to enter, and conducting a successful product launch in these large markets.
- Our base valuation for MVP is $5.38 per share, which includes a 40% risk weight on the 50+ country roll out (ex China & the US), a 40% risk weight on the China opportunity and 50% on the US opportunity. We previously used a 40% risk weighting for the US in our initiation report in November. We think a slightly more optimistic weighting is now justified given that 6 million doses of Penthrox have been sold worldwide, that the UK and France roll-outs are 3 years and 2.4 years in without any safety issues arising of which we are aware, and that a new FDA meeting has been scheduled.
- If MVP is successful in gaining approval in these new markets, our valuation rises to $7.50 per share.
- In addition, there are several "blue sky" opportunities that MVP is working on which we have considered (see items 6 & 7 in the table below). These could take our valuation to around $8.60 per share (unrisked).
- We value MVP shares in a range of $5.38 to $7.50 per share, as there are many moving parts, and a wide range of valuation outcomes as MVP executes on its strategy.
- We set our 12-month price target at the midpoint of $6.40 (was $5.70 per share), recognising that a wide range of outcomes are possible on a high growth, small cap stock such as MVP.

DCF / Sum of the Parts Valuation	Unrisked NPV $m	Unrisked Value Per Share	Risk Factor Applied	Risked NPV $m	Risked Value Per Share
1. Base Valuation of company (Pharma includes 38 countries approved to date)	251.7	$3.84	n/a	251.7	$3.84
2. Further Countries to be approved: (50 new countries, could be more)(exclude US & China)	71.1	$1.09	40%	28.5	$0.43
3. China Opportunity	52.3	$0.80	40%	20.9	$0.32
4. US Opportunity	99.5	$1.52	50%	49.7	$0.76
5. Mundipharma milestones (could be others) (assume A$52m max received in year 6, & 80% margin)	17.0	$0.26	10%	1.7	$0.03
Subtotal	491.7	$7.50		352.5	$5.38
Blue Sky Opportunities :					
6. Penthrox into new segments (Assume adds 10% to Pharma sales, from FY21)	23.2	$0.35	20%	4.6	$0.07
7. Value of new "flow" manufacturing technology					
7a. Internal use - Assume reduces Pharma Divn COGS from 30% to 27% from FY20	18.7	$0.29	10%	1.9	$0.03
7b. External use - New drug applications - Guestimate	30.0	$0.46	0%	0.0	$0.00
Total Valuation	563.6	$8.60		359.1	$5.48

Source: Phillip Capital estimates
Assumptions: 10 year DCF model; WACC 10.0%, TGR 4.0% except we use 5.0% for China

Company Description

Medical Developments International Limited (MVP), is an Australian based healthcare company. The Company operates through three segments: Pharmaceuticals, Medical Devices and Veterinary products.

Pharmaceuticals (59% of FY18 sales) - is engaged in the manufacture and sale of "Penthrox" (methoxyflurane), a generic pharmaceutical product which provides pre-hospital and emergency pain relief, by being inhaled by the patient through an associated delivery device (the Penthrox inhaler, also known as the "green whistle"). Penthrox has been manufactured in Australia by MVP since 2002, and MVP is the only known manufacturer of the drug. Sales have expanded from Australia and New Zealand, into several major new markets including Ireland (Nov 2015), the United Kingdom (Jan 2016), and France (Feb 2017), with approvals now received for 38 countries and a number of launches now in progress (Germany, Spain, Italy and Mexico expected early 2020).

Medical Devices (37% of Sales) – This segment is engaged in the sale of medical devices that improve respiratory care. These include anti-static valved holding chambers ("Space Chambers") for the delivery of asthma and COPD medications, "Breath Alert" breathing flow meters, and finger-tip pulse oximeters for measuring oxygen levels in the blood. Sales are approximately 50/50 Australia and a growing list of 20 countries in North America, Europe and Asia.

Veterinary Products (4% of sales) - is engaged in the sale of veterinary products within Australia, Europe and the United States. The Company offers a range of products in the areas of pain management, and asthma and resuscitation.

MVP has been profitable every year since listing, and has only had one capital raising since the IPO being the recent $24.5m placement and SPP in Aug/ Sep 2018 (at $4.00 per share). MVP has funded its own growth internally, and with upfront licence payments (non-refundable) received for Penthrox.

Investment Thesis

MVP's Penthrox "green whistle" emergency pain relief product (the inhaler device plus the fast-acting methoxyflurane generic drug) is a remarkable 30 year old product in the midst of major international roll-out.

In the last 5 years, major pharmaceutical distributors have paid $41m in upfront licence fees and early milestones to secure their territory licences for Penthrox including: Galen Pharmaceuticals $1.6m for the UK/Ireland; Mundipharma $16.4m for Europe; Purdue $1.5m for Canada; and Daiichi Sankyo $21m ($7m net of estimated costs) for China Thailand and Vietnam. This is a strong sign of confidence in Penthrox.

Approvals have now been received for approximately 38 countries including Germany, Italy and Spain. Product launches are underway or imminent with quality pharmaceutical distributors noted above.

We forecast Penthrox sales to grow from $8.1m in FY18 to $126m for the 38 approved countries over the next 12 years. Approvals to be sought for a further 50+ countries including the USA, China and Russia could take this to $260m in annual sales (not in our forecasts).

The product is proven with over 6 million doses sold over 30+ years in Australia, 14 years in New Zealand, 3+ years in the UK and 2+ years in France.

MVP's Medical Equipment division (asthma devices) is also expanding internationally with new ranging in >15,000 US pharmacies including Walmart, Kmart and Costco.

Medical Developments (MVP:$5.22)

PROFIT AND LOSS ($m)

Year ending Jun	17(a)	18(a)	19(e)	20(e)	21(e)
Sales revenue	18.3	17.5	21.2	25.6	30.9
EBITDA	3.8	2.2	3.6	4.9	6.4
Depreciation	1.3	1.8	2.3	2.8	3.2
EBITA	**2.5**	**0.4**	**1.2**	**2.1**	**3.2**
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0
EBIT	**2.5**	**0.4**	**1.2**	**2.1**	**3.2**
Interest exp (income)	-0.0	0.1	-0.4	-0.4	0.2
Pre-tax profit	**2.5**	**0.3**	**1.6**	**2.5**	**3.0**
Tax expense	0.6	0.1	0.5	0.7	0.8
Tax rate (%)	*26.1%*	*19.3%*	*27.5%*	*27.5%*	*27.5%*
Minorities/pref divs	0.0	0.0	0.0	0.0	0.0
Equity accounted NPAT	0.0	0.0	0.0	0.0	0.0
NPAT	**1.8**	**0.2**	**1.2**	**1.8**	**2.2**
NPAT pre-g'will	**1.8**	**0.2**	**1.2**	**1.8**	**2.2**
Significant items	0.0	0.0	0.0	0.0	0.0
Reported NPAT	1.8	0.2	1.2	1.8	2.2

BALANCE SHEET ($m)

Year ending Jun	17(a)	18(a)	19(e)	20(e)	21(e)
Cash	1.7	0.8	31.5	18.1	3.8
Receivables	5.2	4.3	5.2	6.3	7.6
Inventories	2.4	3.2	3.9	4.7	5.7
Other	0.5	0.5	0.4	0.4	0.4
Current assets	**9.9**	**8.7**	**41.0**	**29.5**	**17.4**
Net PPE	6.6	8.1	9.8	11.4	13.3
Investments	0.0	0.0	0.0	0.0	0.0
Intangibles	24.2	31.6	36.9	49.0	59.9
Other	1.1	1.1	5.8	7.0	8.5
Non-current assets	**31.9**	**40.8**	**52.5**	**67.4**	**81.7**
Total assets	**41.8**	**49.5**	**93.5**	**96.9**	**99.2**
Current payables	2.7	3.2	3.9	4.7	5.7
Debt	0.4	9.3	9.9	8.6	6.8
Provisions	0.7	0.6	2.8	3.4	4.1
Other	16.5	15.5	40.5	40.5	40.5
Total liabilities	**20.4**	**28.5**	**57.1**	**57.1**	**57.0**
Equity	15.0	16.1	40.4	40.4	40.4
Reserves	0.3	0.7	0.7	0.7	0.7
Retained profits	6.3	4.2	2.9	2.1	1.7
Minorities			0.0	0.0	0.0
Total s/h funds	**21.6**	**21.0**	**44.0**	**43.2**	**42.8**
Total funds emp.	**42.0**	**49.5**	**101.1**	**100.3**	**99.8**

CASHFLOW ($m)

Year ending Jun	17(a)	18(a)	19(e)	20(e)	21(e)
EBIT	2.5	0.4	1.2	2.1	3.2
Net interest recd (paid)	-0.0	-0.1	0.4	0.4	-0.2
Dep'n and amort'n	1.3	1.8	2.3	2.8	3.2
Tax refund (Tax paid)	-4.3	0.0	-3.8	-0.7	-0.8
Upfronts & Milestones recd	7.4	1.0	20.8	4.2	2.8
(Inc)/dec in working cap	2.8	0.7	-0.9	-1.1	-1.3
Other	-5.5	-2.0	2.2	0.6	0.7
Operating cashflow	**4.0**	**1.8**	**22.3**	**8.3**	**7.6**
Investing activities					
Capital expenditure	-4.4	-2.1	-2.7	-2.8	-3.2
Intangibles (Capit Regn Cos	-4.3	-8.6	-6.6	-13.7	-12.8
Investments	0.0	0.0	0.0	0.0	0.0
Divestments	0.0	0.0	0.0	0.0	0.0
Financing activities					
Equity raised	2.0	0.4	24.3	0.0	0.0
Change in loans	-0.1	8.8	0.6	-1.4	-1.8
Dividends paid	-1.2	-1.2	-2.5	-2.6	-2.6
Other non-op flows	-0.0	-0.0	-4.7	-1.2	-1.4
Net chg in cash	**-4.0**	**-0.9**	**30.7**	**-13.4**	**-14.3**

LIQUIDITY AND LEVERAGE RATIOS

Year ending Jun	17(a)	18(a)	19(e)	20(e)	21(e)
Net debt (Net cash) ($m)	-1.3	8.5	-21.6	-9.5	3.0
Net debt / equity (%)	**-5.8%**	**40.2%**	**-49.0%**	**-22.1%**	**6.9%**
Interest cover (x)	(614.8)	3.2	(3.1)	(5.3)	16.2

PROFITABILITY RATIOS

Year ending Jun	17(a)	18(a)	19(e)	20(e)	21(e)
EBITDA / sales (%)	20.7%	12.7%	16.9%	19.2%	20.8%
EBITA / sales (%)	**13.4%**	**2.5%**	**5.9%**	**8.3%**	**10.5%**
Return on assets (%)	6.5%	1.0%	2.2%	3.0%	3.7%
Return on equity (%)	9.0%	1.1%	3.7%	4.2%	5.1%
Return on funds emp (%)	14.4%	1.8%	4.8%	7.6%	8.1%

GROWTH RATES (% over pcp)

Year ending Jun	17(a)	18(a)	19(e)	20(e)	21(e)
Sales		-4.8%	21.2%	21.2%	20.5%
EBITDA		-41.4%	60.5%	38.2%	30.2%
EBITA		-82.1%	180.7%	71.9%	52.0%
Pre-tax profit		-87.8%	444.1%	54.3%	20.0%
NPAT pre-g'will		-86.6%	388.6%	54.3%	20.0%
EPS		-86.9%	344.3%	50.9%	20.0%

MULTIPLES AND PER SHARE DATA

Year ending Jun	17(a)	18(a)	19(e)	20(e)	21(e)
EPS cents	3.1	0.4	1.8	2.8	3.3
DPS	4.0	4.0	4.0	4.0	4.0
Franking	100%	100%	100%	100%	100%
Payout ratio	127%	971%	218%	145%	121%
CFPS	6.9	3.0	34.4	12.5	11.5
NTA	-0.04	-0.18	0.11	-0.09	-0.26
PER	166.2	1266.9	285.1	188.9	157.4
Div yield (%)	0.8%	0.8%	0.8%	0.8%	0.8%
P/CF	75.2	171.9	15.2	41.7	45.5
P/NTA	-119.0	-29.1	48.7	-59.5	-20.2
EV/EBITDA	80.8	142.8	89.8	67.4	53.7
EV/EBITA	124.7	719.6	258.9	156.3	106.7

WORKING CAPITAL RATIOS (% of sales)

Year ending Jun	17(a)	18(a)	19(e)	20(e)	21(e)
Current receivables	28.5%	24.6%	24.6%	24.6%	24.6%
Current inventory	13.2%	18.3%	18.3%	18.3%	18.3%
Current payables	14.9%	18.5%	18.5%	18.5%	18.5%
Current provisions	1.9%	2.0%	12.0%	12.0%	12.0%
Non-current provisions	2.1%	1.2%	1.2%	1.2%	1.2%

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