Medical Developments International



Vision

Medical Developments International (MDI) is a leading Emergency Medicine Company.

Our aim is to:

- 1. Dominate the analgesic trauma and minor surgical procedures market domestically and internationally.
- 2. Dominate the Respiratory Medical Devices market domestically and internationally.
- 3. Provide unique and innovative products to assist our customers in the management of acute and procedural pain, delivery of respiratory medications, resuscitation and oxygen therapies for human and veterinary patients.



Vision

MDI is working on and delivering two significant business opportunities.

Both opportunities are "company making".

The risk profile of these opportunities is relatively low and well understood.

Penthrox: Our regulatory initiatives, if successful, will transform the company. Penthrox has the potential to be the market leader in emergency analgesic markets in Europe and elsewhere.

Our Respiratory medical devices should generate significant growth.



Two world class opportunities Penthrox

- Significant competitive advantages to other analgesics.
- Fast, safe, rapid on-set, effective, cost-competitive, self administered.
- No needles, non-opiate, easy to store & transport.
- Building world class regulatory dossier to enable sales of Penthrox in other countries around the world.
- Completed successful phase III trials in Europe.
- Completed other successful clinical trials.
- Positive feedback from European Regulatory Authorities and working towards approval during FY15.
- Working on reducing the cost to compete with other analgesics.



Two world class opportunities Respiratory Medical Devices

- Leading patented asthma & COPD medicine delivery devices.
- Low resistance, more efficient medicine dosage delivery.
- Won international tenders and major contracts in NZ, Canada, Germany & Australia to supply "Space Chambers".
- Lodged US FDA application.
- Independent testing prove "best delivery of medicine".
- Significant growth in Asthma device sales since 2011.
- Increasing customer base recently established European head office & distributors – recently established North American head office.



Three business divisions

- Pharmaceutical
- Medical devices
- Veterinary.

We have a widely recognised portfolio of brands such as

- Penthrox
- Space Chamber
- Space Chamber Plus
- OXI-Port
- OXI-Sok
- KAB Absorber
- OXI-Life



Net Profit After Tax	Total Sales	Earnings Before Interest and Tax	Net Profit After Tax
\$1.529m	24% tup on prior period	191% tup on prior period	75% tup on prior period
Bank Debt *		Cash Flows From Operating Activities	
\$2.46m	* Net bank debt of nil when combined with closing cash balances	159% tup on prior period	



Results	FY15 \$'000	FY14 \$'000	Growth
Sales	11,608	9,365	24%
EBITDA	2,509	976	157%
EBIT	2,251	776	191%
NPAT	1,529	876	75%



MDI is recognised as a leader in pain relief, emergency medical devices; oxygen therapies and respiratory products. Our products are the first choice of professionals in the hospital, pre-hospital, first aid environments, universities and veterinary institutions.

Medical Developments International (MDI) commenced operations in 1972 and listed as a public company in December 2003.

MDI design, manufacture and distribute innovative healthcare products within Australia and Internationally and is located in Melbourne, Australia.

Our products are used in 11 countries with the list of new country registrations increasing.

Our manufacturing facilities are ISO 13485, GMP compliant.



MDI Pharmaceutical

Penthrox®

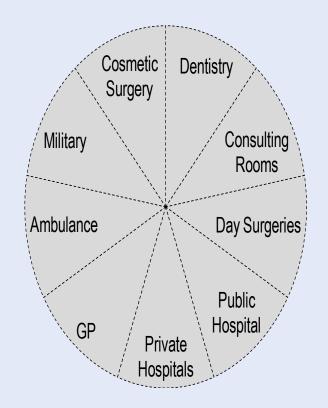
- Inhalational analgesic
- Demonstrated safety and efficacy profile
- Only manufacturer in the world
- Sold in Australia, N.Z, GCC
 South America, Eastern Europe & others
- Manufactured in GMP compliant plant





Penthrox Clinical application

- Burn injuries
- Breaks, fractures and dislocations
- Abdomen pain
- Chest pain
- Other acute pain



Painful procedures

- Cutaneous excisions
- Liquid nitrogen removals of skincancers, warts, etc
- Invasive angiographies
- Dental procedures
- Colonoscopy
- Imaging
- Other non-general anaesthetic painful procedures

Either as an adjunct to or replacement of current forms of pain relief



Penthrox Benefits to medical professionals

Rapid onset of action

Minimal waiting time before a painful procedure can be performed (3 minutes) and rapid pain relief when a patient is treated for burns, trauma, etc.

Inhaled selfadministration Medical professionals can perform a procedure/attend to an injury whilst the patient is self-administering with minimal supervision needed.

Improve patient compliance

Effective at calming patients before procedures; makes patients more compliant and cooperative during treatments/procedures.

Portable, easy to use

Easy to store in a range of clinical settings (doctor's bag, ambulance, GP/specialist consulting rooms, hospital departments, military unit, etc.)



Penthrox Benefits over Nitrous Oxide

Penthrox® does not effect vital signs; no clinical depression of respiration or circulation at low analgesic dosing.

Self-administration, easy to use and administer.

Compact and can be used in any location or situation.

No risk of overdose.

Single use device ensures no cleaning or cross contamination.

Medical professionals can perform a procedure / attend to an injury almost immediately whilst the patient is self-administering with minimal supervision.

Offset ranges from 3-5 minutes up to 20 minutes.

Easy and stable to store.

Patients can drive themselves home.



Penthrox Benefits over Morphine

The benefits of using Penthrox® over Morphine are the same as detailed for Nitrous. In addition there are a number of specific benefits Penthrox has over Morphine which include:

- Penthrox can be used on children, Morphine often cannot.
- Penthrox is not a narcotic; opioid or drug of addiction.
- Penthrox has less severe side effects.
- Penthrox is non invasive no needles.
- Penthrox has a quicker onset to pain relief.
- Penthrox can be used by a wider community of health professionals including first aiders and volunteers.
- Morphine has considerable and complex administration and monitoring protocols during its use and for a significant time during recovery.
- Penthrox does not require specific storage and use protocols.



MDI has signed a deal with CSIRO to develop a new manufacturing technique for Penthrox

If successful this will provide MDI with:

- World leading intellectual property
- 2. Very significant increased production capacity
- 3. Very significant reduction in cost to manufacture
- 4. Very significant competitive advantage



Our aim is to create a world class regulatory dossier capable of gaining approval to sell Penthrox anywhere in the world.

MDI has spent more than \$7 million on developing a regulatory dossier capable of getting Penthrox approved for sale in other countries.

Our Marketing Application was submitted to European authorities during 2013. We have received positive feedback from the authorities indicating that Penthrox is "approvable" subject to completing a number of tasks.

We are working towards achieving formal approval.



MDI is working on regulatory approvals to expand into new countries in Europe, Central America, Canada, Asia, Africa, Russia, Israel, Saudi Arabia. The following numbers are MDI estimates of the market potential for Penthrox in Europe:

		AUD million
EUROPE	Penthrox potential sales	\$422

		AUD million
UK	Penthrox potential sales	\$40
France	Penthrox potential sales	\$37
Germany	Penthrox potential sales	\$38
Italy	Penthrox potential sales	\$36
Spain	Penthrox potential sales	\$28
Rest of Europe	Penthrox potential sales	\$243





Our plan is to use the Regulatory dossier to improve the positioning and obtain approvals to sell Penthrox around the world.

We are developing new Penthrox products which could deliver IP protection.

We are developing a new manufacturing methodology to make Penthrox.

If successful it may be possible to sell millions of units of Penthrox per year.



Since 1985 Medical Developments International has invested significant R&D resources to improving the delivery of Asthma and COPD medication.

In 2011 MDI launched the Space Chamber Plus® and the Compact Space Chamber Plus® in the Australian and International markets.

Both these spacers include MDI's Cross Valve Technology TM, a patented system of drug delivery which ensures very low resistance during inhalation and exhalation, while maximizing the dose of medication available.

MDI products are world leaders in their field.



MDI offers a range of innovative world leading devices that can be used to help patients manage and take control of their asthma and COPD.

- Space Chamber Plus® aerosol spacer
- Space Chamber® re-usable
- Compact Spacer Chamber Plus®
- Breath-Alert® peak flow meter
- EZ-fit face masks
- KDK oxygen regulators











MDI Space Chamber Plus ®

- Recently approved by the FDA for sale in the USA.
- Recently registered by MHRA for full reimbursement.
- Won an international tender in New Zealand to supply MDI's range of asthma products exclusively for three years.
 - ✓ Defeated more than 10 international bidders.
- German distributor replaced its entire range of competitors products with MDI's Space Chambers.
- Won a tender to supply Canadian Hospitals with MDI's Space Chamber for 5 years.



MDI Space Chamber Plus ®

- New patent cross valve technology
- Universal end suitable for all Metered Dose Inhalers
- Compact design
- Provides very low resistance for both inhalation and exhalation
- Enables unrestricted and continuous breathing
- Performance equivalent to worlds best practice for inhalers
- Transparent design to allow you to see medication delivery
- Superior looks
- Can be used with any international standard facemask
- Best value



The MDI Space Chamber Plus®is worlds best practice for delivering Asthma medications

	125	μg/actuation;	Canister	Batch	numbers:	AN9158	(Exp APR/13)	
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		Weight of drug per actuation (μg)		% drug per actuation	
Device		Exiting Spacer	Particles	Exiting Spacer	Particles
SpaceChamber plus (n=6)	Mean	58.7	47.6	52.6	42.7
	SD	4.9	4.5	3.0	3.1
	cv	8.3	9.6	5.7	7.4
AeroChamber plus (n=6)	Mean	46.6	39.5	41.3	35.0
	SD	6.4	4.7	4.9	3.9
	cv	13.7	12.0	11.9	11.0
Breath-A-Tec (n=6)	Mean	43.3	37.7	38.3	33.4
	SD	7.5	6.6	6.7	6.1
	cv	17.2	17.4	17.5	18.4



References

- 1. Laboratory Usage of respiratory spacers and the delivered Fluticasone (Flixotide) dose of commonly used spacers available in Australia and New Zealand.
- 2. Output of Fluticasone (Flixotide) pressurized metered dose inhaler (pMDI) delivered via Space Chamber Plus, the Aerochamber and the Breath a Tech Spacer device. Data on file at MDI

Respiratory division Future

We now have business and are making sales in:

Australia UK Singapore

Hong Kong Canada Malaysia

Belgium Germany Netherlands

Asia Greece Italy

Spain USA Denmark

New Zealand UAE Austria

Switzerland



Respiratory division Future

MDI is investing heavily in developing new and innovative products

- Anti static spacers
- Anti static mask (1st of its kind)
- Electronic peak flow
- Smart phone asthma & COPD applications



MDI Medical Rescue and resuscitation

Our emergency medical equipment business has grown significantly since FY2011.

MDI is the preferred supplier in a number of markets including:



Ambulance, Non-emergency transport and Emergency First Aid

Various public and private health sectors (GP clinics, hospitals, aged care facilities) via wholesale and distribution channels



MDI Medical

Design, assemble and test a wide range of medical devices

ISO 13485 & GMP compliant assembly facilities

Over 30 devices in product portfolio

Focus on respiratory system and oxygen delivery

- Asthma management
- Oxygen delivery and equipment
- CO₂ absorbers
- Ventilators





MDI Veterinary

Design, assemble and test a wide range of veterinary devices

Focus on anaesthesia and surgical consumables

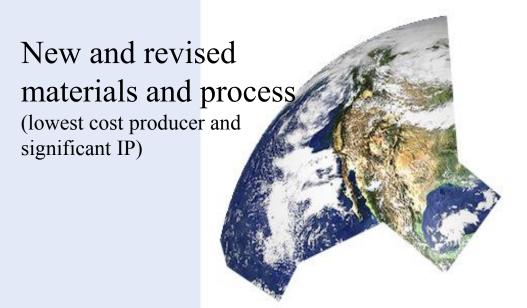


Anaesthesia

- Anaesthetic machines (closed circuit system)
- Breathing circuits
- Vaporisers







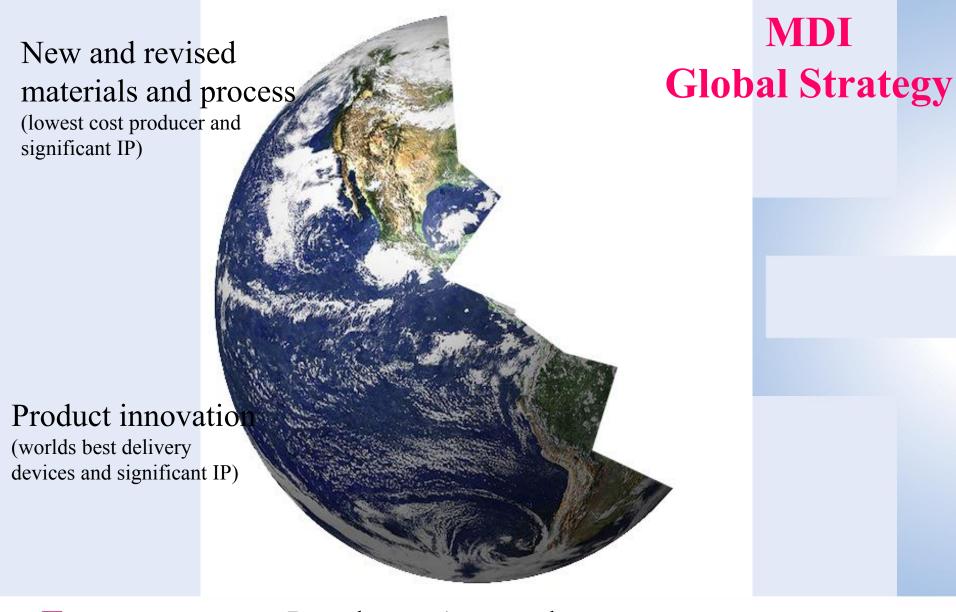
MDI Global Strategy





MDI Global Strategy

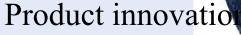






Regulatory Approval and new markets





(worlds best delivery devices and significant IP)



Regulatory Approval and new markets



(Commercial clinical studies to support marketing and product development)

MDI

Global Strategy

New and revised materials and process (lowest cost producer and significant IP)

MDI Global Strategy

> New Business Partners

Product innovation

(worlds best delivery devices and significant IP)

Clinical trials

(Commercial clinical studies to support marketing and product development)



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Forward looking statements

This document contains certain forward looking statements relating to Medical Development International's business, which can be identified by the use of forward looking terminology such as "promising", "plans", "anticipated", "will", "project", "believe", "forecast", "expected", "estimated", "targeting", "aiming", "set to", "potential", "seeking to", "goal", "could provide", "intends", "is being developed", "could be", "on track" or similar expressions or by express or implied discussion regarding potential filings or marketing approvals, or potential future sales of product. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from any future results, performance or achievements expressed or implied by such statements. There can be no assurance that any existing or future regulatory filings will satisfy any health authorities' requirements regarding any one or more product candidates nor can there be any assurance that such product candidates will be approved by any health authorities for sale in any market or that they will reach any particular level of sales. In particular, management's expectations regarding the approval and commercialization of the product candidates could be affected by, among other things, unexpected clinical trial results, including additional analysis of existing clinical data, and new clinical data; unexpected regulatory actions or delays, or government regulation generally; our ability to obtain or maintain patent or other proprietary intellectual property protection; competition in general; government, industry, and general public pricing pressures; and additional factors that involve significant risks and uncertainties about our products, product candidates, financial results and business prospects. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated or expected. Medical Development International Limited is providing this information as of the date of this document and does not assume any obligation to update any forward-looking statements contained in this document as a result of new information, future events or developments or otherwise.

