

### Forward looking statements

This presentation contains forward-looking statements.

These statements are not guarantees of Medical Therapies Limited's future performance and involve a number of risks and uncertainties that may cause actual results to differ materially from the results discussed in these statements.

Factors that might cause the Company's results to differ materially from those expressed or implied by such forward-looking statements include, but are not limited to, development and commercialisation of the Company's product portfolio, development or acquisition of additional products and other risks and uncertainties.

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# Midkine portfolio acquisition

- Rationale for the acquisition of the midkine portfolio
- What is midkine?
- Details of the IP Agreement
- Midkine therapeutics portfolio
- Midkine diagnostics portfolio
- MTY post acquisition

or personal

Timetable of key events

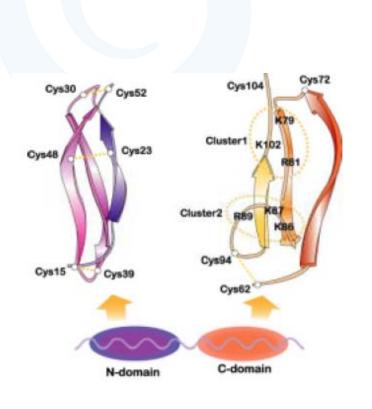
#### Rationale for midkine (MK) acquisition

	MTY acquisition criteria	Midkine portiolio
esh li	Sound scientific principles underlying the technology with clear regulatory path and strong commercial potential	<ul> <li>Known composition and mechanism of action</li> <li>Extensive in vitro and preclinical data (strong regulatory position) with a range of commercialisation opportunities</li> <li>Interest in MK from major pharma/biotech companies</li> <li>\$10M spent on midkine since 2001</li> </ul>
	Therapeutic areas of cancer and inflammation	<ul><li>MK for heart tissue damage</li><li>MK inhibitors for cancer, RA and auto-immune disease</li></ul>
	Late stage technology or technology platform with development potential	© Rich technology platform © Potential for delivering early revenue via diagnostics © High value therapeutic product development programs
	Mostly share based acquisition	© 20 million shares © \$1.5M cash
	PLUS →	<ul> <li>Outstanding scientists, including discoverer of midkine</li> <li>Strong IP position with clear FTO in key areas of interest</li> <li>Diagnostic platform with early revenue potential</li> <li>Therapeutic collaboration potential in a number of indications</li> </ul>



#### Midkine

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- Discovered in 1988 by professors Muramatsu and Kadomatsu at Nagoya University
- Low molecular weight growth factor like protein (13kD) with two domains
- Highly expressed in oncogenesis, autoimmune and inflammatory diseases
- Midkine has a role in anti-apoptosis, cell migration, angiogenesis and cell growth

#### **MIDKINE MEDIATES:**

Cancer progression
Onset of inflammatory diseases
Preservation and repair of injured tissue

Midkine is strong therapeutic and diagnostic target

## Intellectual Property Agreement

#### MTY will acquire from Cell Signals (CS)

- Therapeutic applications for midkine the protein
- 120+ anti-midkine antibodies with their therapeutic applications and antimidkine nucleotides (cancer and autoimmune diseases such as MS)
- Diagnostic applications of midkine and anti-midkine antibodies owned by CS

#### © Consideration

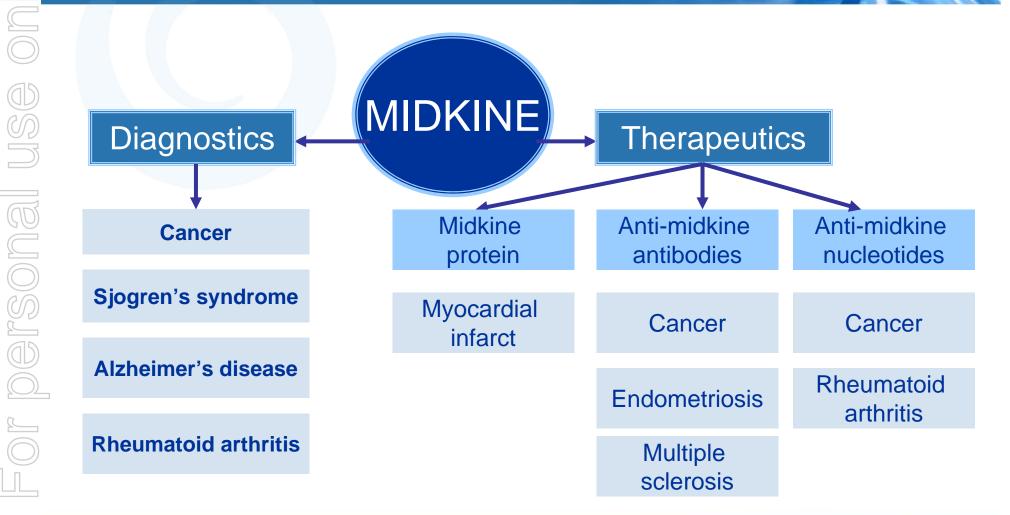
- \$1.5M cash
- 20 million MTY shares

#### © Conditions

- Due diligence on the midkine intellectual property portfolio
- Approval of the transaction by a general meeting of MTY shareholders
- Private placement of shares to the value of \$2M



## Midkine portfolio



# Intellectual Property Portfolio

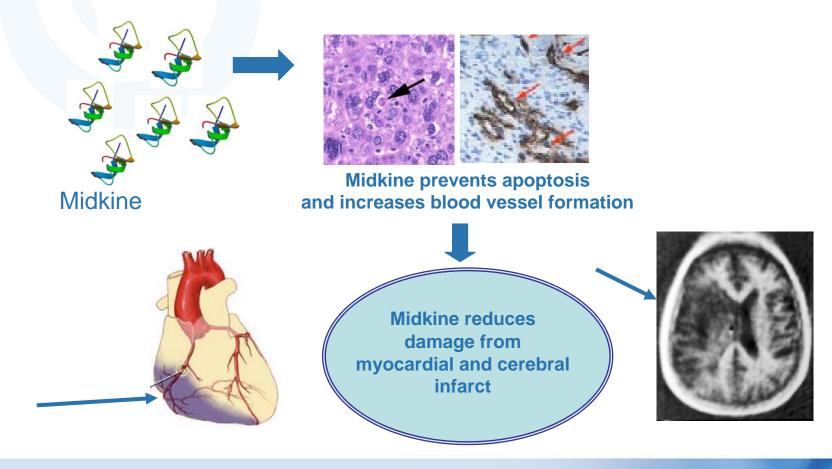
- 28 patents covering use and manufacture of midkine, anti-midkine antibodies and anti-midkine nucleotides for diagnostic and therapeutic applications:
  - 120+ anti-midkine antibodies and all reagents
  - ELISA tests for

- Early detection of cancer
- Diagnosis of rheumatoid arthritis
- Diagnosis of Alzheimer's disease
- · Diagnosis of Sjogren's Syndrome
- Therapeutics
  - Preclinical data supporting use of midkine for the prevention and treatment of heart damage during myocardial infarct
  - Anti-midkine antibodies for the treatment of inflammatory conditions and autoimmune diseases
  - Anti-midkine antibodies and nucleotides for the treatment of cancer



#### **Therapeutics Portfolio: Midkine**

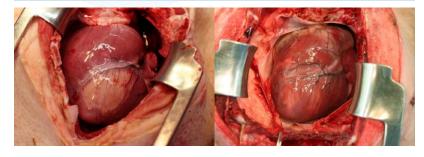
#### Using midkine and its protective function



#### Treatment for heart tissue damage

 Addition of midkine reduces heart tissue injury in animal models by reducing apoptosis and increasing angiogenesis

#### Pig model



Control

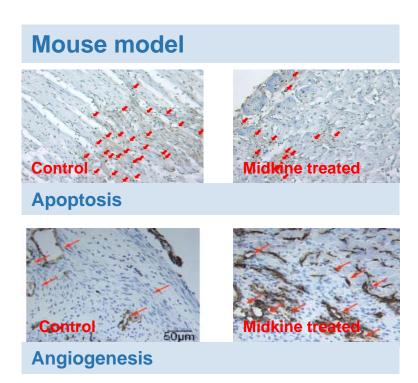
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Midkine treated

Mortality rate after 24h:

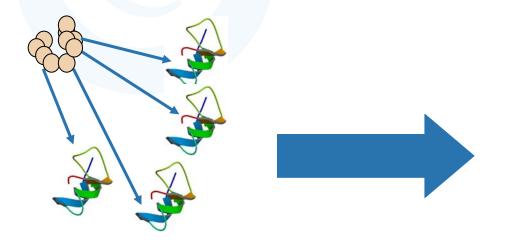
•Control: 4/12 (33.3%)

• MK-treated: 1/9 (11.1%)



#### Therapeutics portfolio: Midkine inhibitors

#### Inhibition of midkine using anti-midkine antibodies and nucleotides



Inhibition of midkine is potential treatment

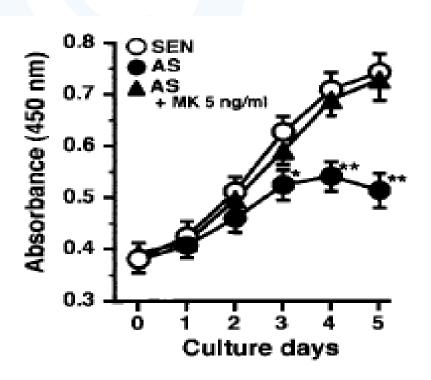


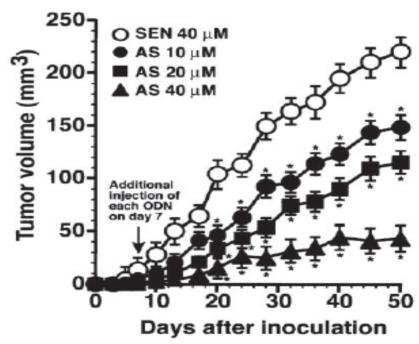
Solid Tumours
Rheumatoid arthritis
Multiple sclerosis
Endometriosis

Midkine is expressed during oncogenesis, inflammation and tissue repair

### Treatment for rectal carcinoma

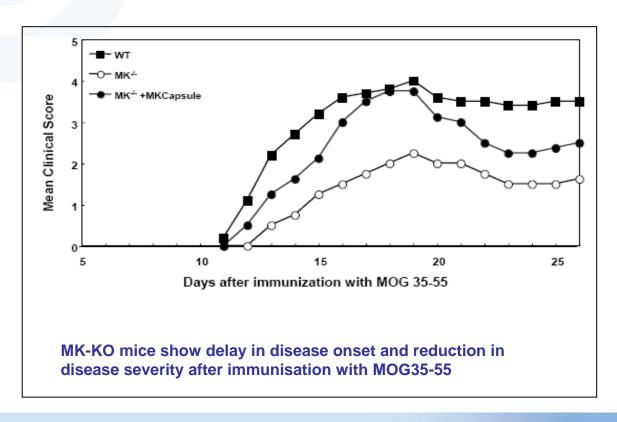
 Anti-midkine antisense DNA directed to suppress growth of mouse rectal carcinoma cells (CMT-93) (Takei et al, 2001)





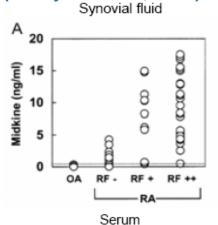
## Treatment for multiple sclerosis

 MS symptoms are reduced when MOG35-55 is administered to mice with no midkine genes (Wang et al, 2008)

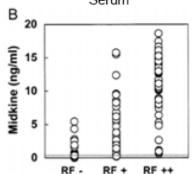


#### Treatment for rheumatoid arthritis

MK as a new target for treating RA (Maruyama et al, 2004)

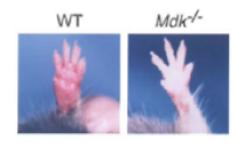


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Increased levels of MK in patients with RA

	No. of arthri		Incidence (%)
	+	-	
WT	6	1	86
KO-MK	1	9	10
MK pump	9	3	75



- 6/7 (86%) WT mice show symptoms from antibody-induced arthritis
- 1/10 of MK-KO (10%) mice show symptoms

# Global markets for key indications

INDICATION	GLOBAL PREVALENCE	TREATMENT	GLOBAL MARKET (US\$)
Acute myocardial infarct	~ 32 million heart attacks / year	<ul><li>Surgery</li><li>ACE inhibitors</li><li>Beta blockers</li><li>Fibrinolysis</li></ul>	Cardiovascular drugs worth ~ \$82.4 billion in 2007
Cancer	~ 25 million	Chemotherapy Radiotherapy Targeted therapies	<ul> <li>\$4 billion in 2007 for Herceptin alone</li> <li>Estimated \$45 billion in 2012 for global cancer drug market</li> </ul>
Multiple sclerosis	~ 3 million	Disease-modifying agents	\$4.9 billion in 2006
Rheumatoid arthritis	~ 5 million	NSAIDs Corticosteroids Biologicals	\$16 billion in 2006
Endometriosis	~ 89 million	NSAIDs Surgery Hormonal therapy	\$2.2 billion by 2014 for pharmaceutical treatments alone



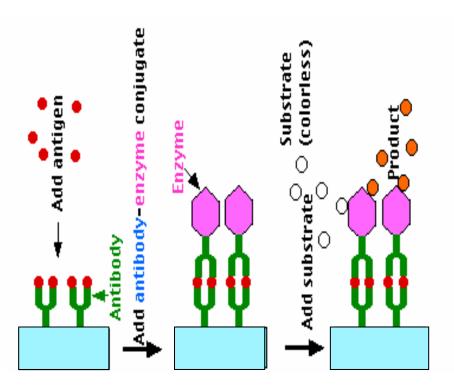
# Therapeutic portfolio

	2008				2009					2011						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Acute myocardial infarct		I	Preclin	nical	Phase 1/2A						Phas					
Multiple sclerosis			Pre	eclinical	l Phase 1/2A			Phase 2B								
Cancer		Pre	eclinical		Pha	ase 1/2	A				ase 2B					
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### **Diagnostic Products**

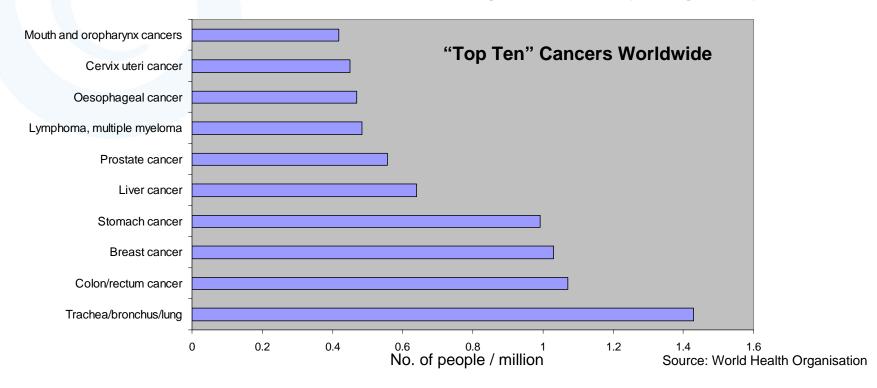
Detection of midkine using Enzyme-linked Immunoassay (ELISA)





### Incidence and cost of cancer

Almost 11 million new cases of cancer diagnosed each year globally





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### Breast cancer diagnostic

Breast cancer	Oth	Midkine*				
Stage	CA15-3	BCA225	CEA	Wildkille		
0	0% 0% 0%			45.5%		
ı	4%	8%	6%	27.9%		
IIA	00/	220/	440/	<b>EO 0</b> 0/		
IIB	8%	22%	11%	50.0%		
IIIA	400/	200/	400/	22.20/		
IIIB	19%	39%	18%	33.3%		
IV	38% 100% 56%		56%	100%		

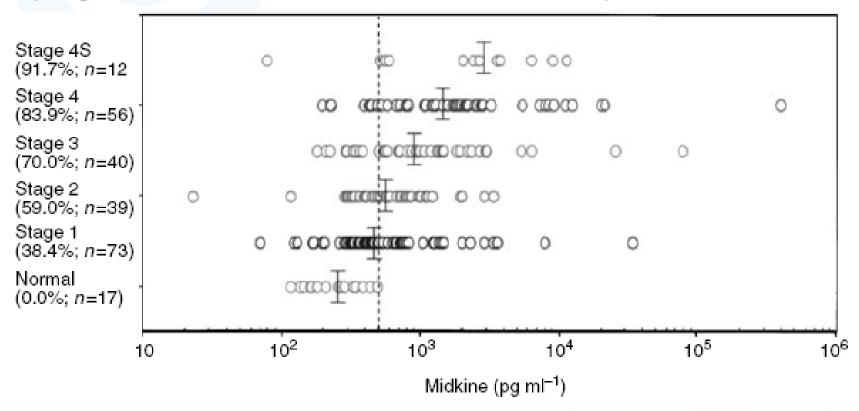
Source:\*Cell Signals, \*\*The Journal of The Japan Medical Association 2004

Midkine detected in 45.5% of stage 0 breast cancers



### Neuroblastoma Diagnostic

Correlation of elevated level of blood midkine with poor prognostic factor of human neuroblastomas (Ikematsu et al, 2003)



## Diagnostic Portfolio

D													E			
	2008				2009				2010				2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
				•			•				•	•				•
Cancer	Rese	earch	use		N. E.								T			
	Clinica	al valida	ation (A	US, EU)	*											
	Clinic	al valic	lation (J	IP, US)	*											
Rheumatoid	Bass	earch i	100													
Arthritis	Rese	arch	use		20.4.2											
Alzheimer's	Clinica	al valida	ation (A	US, EU)	*											
disease	Clinic	al valic	lation (J	IP, US)				*								
Sjogren's	Rese	earch (	ıse													
syndrome	Clinica	al valida	ation (A	US, EU)	*									N. S.	Lau	ınch
	Clinic	al valic	lation (J	P, US)				業						die		

#### MTY – Post Acquisition

#### **Capital structure**

Shares	74,085,624					
New Shares (NS Capital Co)	23,500,000					
New Shares (Cell Signals)	20,000,000					
Total shares on issue	117,585,624					
Options (Employee)	7,505,000					
	9,381,096					

#### **Operations**

- Sydney will remain the pre-clinical/clinical and administrative centre
- Therapeutic R&D will be conducted in Tokyo and in Australia under collaborative arrangements
- Diagnostic portfolio will be clinically validated via collaborations



### Proposed timetable of key events\*

EGM Notice 15 May 2008

Shareholder briefings 16 May – 10 June 2008

EGM 16 June 2008

Issuing of shares under the IP Agreement 18 June 2008

Settlement of IP Agreement 19 June 2008

\*This timetable is subject to change

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