orthocell

Advancing Tissue Repair and Regeneration

Investor Presentation

ASX: OCC

Paul Anderson
Managing Director

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Company Information

Orthocell is a world leading commercial stage regenerative medicine company

•Orthocell's lead product, Ortho-ATI™ is a stem cell therapy to <u>regenerate tendons and ligaments</u>

•Next product in late stage development is Celgro™ - a collagen <u>scaffold for soft tissue reconstruction</u>

ASX:	OCC
Share price	$0.36
Shares on issue	82,500,000
Market cap	$30 million
Options outstanding	5,912,500 (exercisable $0.50) 3,520,000 (exercisable @ $0.62)
Major shareholders	Stone Ridge Ventures 12.34% Paul Anderson 8.44% Ming Hao Zheng 8.56% Qi Xiao Zhou 7.22% Jia Xun Xu 6.26% Australian Super 5.60%

Year highlights

- Increased number of patients treated with Ortho-ATI™ - now more than 270 patients treated with Ortho-ATI™
- First international sales of Ortho-ATI™ in Hong Kong
- Completed first human pilot trial of Celgro™
- Presented successful 4.5 year data on Ortho-ATI™ for Lateral Epicondylitis (tennis elbow) tendon repair
- Presented successful 2 year data on Ortho-ATI™ for Gluteal tendon repair
- Demonstrated first growth of tendon in a lab for future allogeneic tendon repair product
- Completed IPO raising $8MM in oversubscribed offering
- Secured collaboration with Bone Support AG for Celgro™ for bone void covering

Regenerative medicine market

Regenerative medicine is one of the fastest growing health markets driven by:

- an aging population
- increasing participation in sports activities
- growing trend of minimally invasive procedures
- advancement in orthopedic product technologies

U.S., EU and Japan Orthopedic Soft Tissue Repair Market Revenue by Procedure, 2013 –2020 (USD Million)

	Procedures	2013	2014	2015	2016	2017	2018	2019	2020	CAGR (%)
Ortho-ATI	Lateral Epicondylitis	734	758	783	807	832	856	879	903	2.9
Ortho-ATI	Gluteal Tendon	52	52	52	53	53	53	54	54	0.4
Ortho-ATI	Achilles	174	179	184	189	194	199	203	207	2.7
Ortho-ATI	ACL	3,359	3,619	3,882	4,148	4,413	4,677	4,936	5,216	6.6
Celgro	Rotator Cuff	1,823	1,951	2,070	2,185	2,296	2,401	2,499	2,588	5.0
Celgro	Vaginal Prolapse	878	912	946	979	1,012	1,044	1,074	1,104	3.5
	Total (USD MM)	7,020	7,472	7,918	8,362	8,800	9,229	9,645	10,072	5.2

Source: US Europe and Japan Orthopedic Soft Tissue Repair Market: Industry Analysis, Size, Share, Growth, Trends and Forecast, 2014 – 2020, Transparency Market Research 2015

Regen medicine corporate market heating up

Notable Deals 2013/14

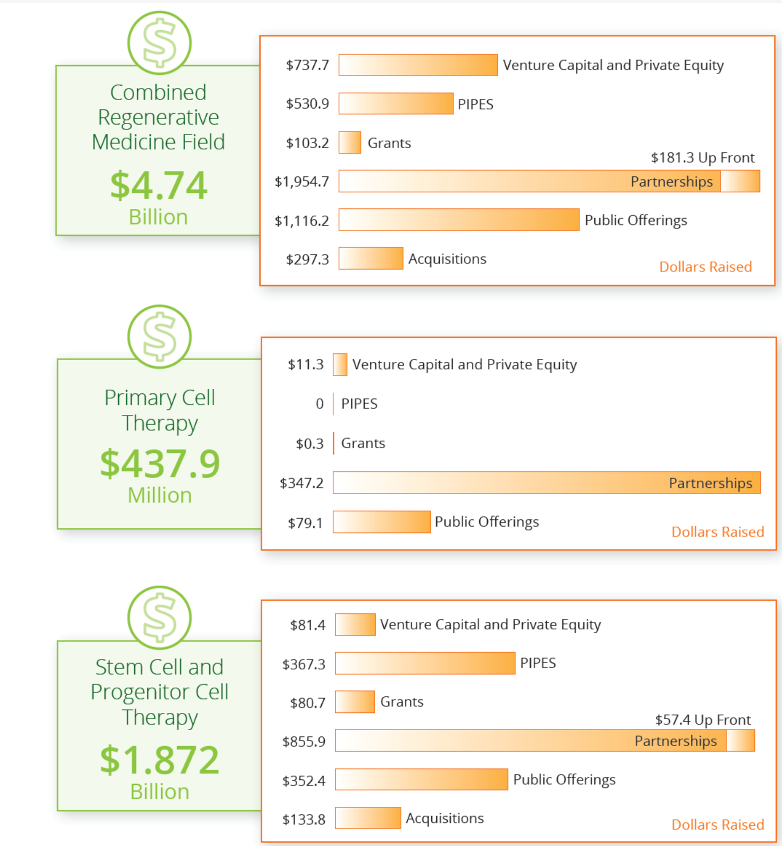
Deal Type	Company(s)	Total Deal Value	Date
Collaboration	Tengion / Celgene	$15M	7/1/13
Merger	Capricor / Nile Therapeutics	NA	7/8/13
Commercialization Agreement	uniQure NV / Chiesi Farmaceutici	$39.8M	7/9/13
Collaboration	Stratatech / BARDA Contract	$47.2M	7/31/13
Acquisition	Mesoblast / Osiris Stem Cell Therapeutic Business	$100M	10/11/13
Licensing Deal	Cytori Therapeutics, Inc. / Lorem Vascular	$500M	11/4/13
Licensing Deal	Pluristem / CHA Biotech	$10.4M	12/17/13
Acquisition	Intrexon / Medistem	$26M	12/20/13
Collaboration/Licensing Deal	Capricor / J&J	$325M	1/6/14
Collaboration	Sangamo / Biogen Idec	$320M	1/9/14
Acquisition of Dermagraft	Organogenesis Inc. / Shire	$300M	1/17/14
Acquisition	SillaJen / Jennerex	$150M	3/17/14

Source: Alliance for Regenerative Medicine Annual Report 2014

Musculoskeletal-related conditions in the U.S. account for 132 million visits to physicians' offices, 29 million visits to emergency rooms, 15 million hospital outpatient visits and cost over $850 billion each year. Further, musculoskeletal injuries in the U.S. cause workers to miss more than 440 million days of work annually.

Source: Penn Center for Musculoskeletal Disorders, *Overview of the Penn Center for Musculoskeletal Disorders*, Perelman School of Medicine website, http://www.med.upenn.edu/pcmd/overview.shtml

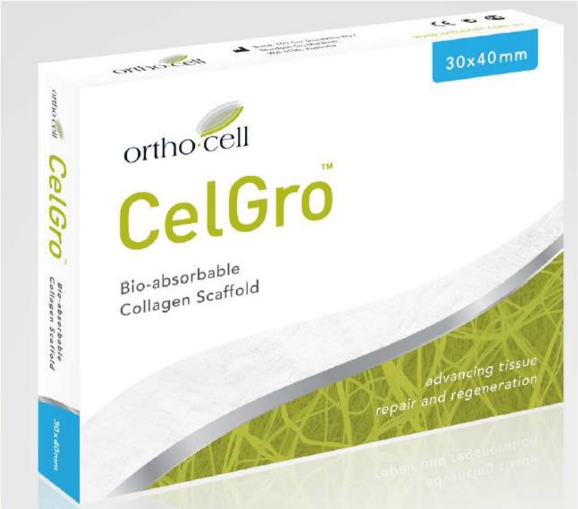
Financings 2013/14



Source: Alliance for Regenerative Medicine Annual Report 2014

Collagen Scaffold - CelGro™

- CelGro™ is a superior tissue regeneration technology that:
- has high mechanical strength and pliability
- has no foreign DNA and is pure
- is very cell friendly



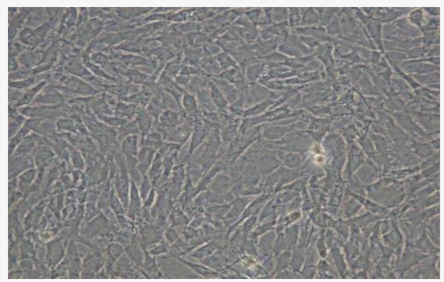
- Multiple applications:
  - tendon augmentation and repair
  - bone repair and regeneration (dental and general)
  - gynaecological and urological soft tissue repair
  - general surgical soft tissue reconstruction
  - ENT tympanic membrane and maxillofacial
- Initial human trials in low risk applications are underway with pilot tympanic membrane (ruptured ear drum) study successfully completed and about to commence guided bone repair for dental application
- ARTG registration application planned for Q2 2015 with European CE Mark immediately thereafter

Global Celgro™ market is significant

- Celgro™ is initially being developed for:
- Rotator Cuff repair - $1.8BB annual market with 45% revision rate for existing surgeries and no strong and resorbable scaffold available; and
- Vaginal Wall prolapse - $800MM annual market with NO scaffold products currently approved, following recent synthetic product withdrawals
- Regulatory approval for one indication allows broader use for general surgical and orthopaedic applications
- Significant M&A and licensing activity in the scaffold area for traditional surgical and newer cell therapy indications, including:
  - 2014 – Organogenesis acquisition of Dermagraft for US $300MM
  - 2013 – DSM buys Kensey Nash for US$360MM
- Orthocell plan to enter into multiple licenses for Celgro™ across different indications, as evidenced by recent Bone Support AB collaboration announcement in bone void repair

Ortho-ATI™ - tendon regeneration

Proprietary method for expanding and cultivating tendon stem cells (*Tenocytes*)



Tendon biopsy from patient to collect tendon stem cells → TGA approved GMP process to expand and cultivate patient's cells → Minimally invasive reinjection of tenocyte cells at site of tendon injury

ATI = autologous tenocyte implantation

Global Ortho-ATI™ market is significant

- Ortho-ATI™ has been applied to most tendon injuries, but regulatory approval in Australia is initially focused on:

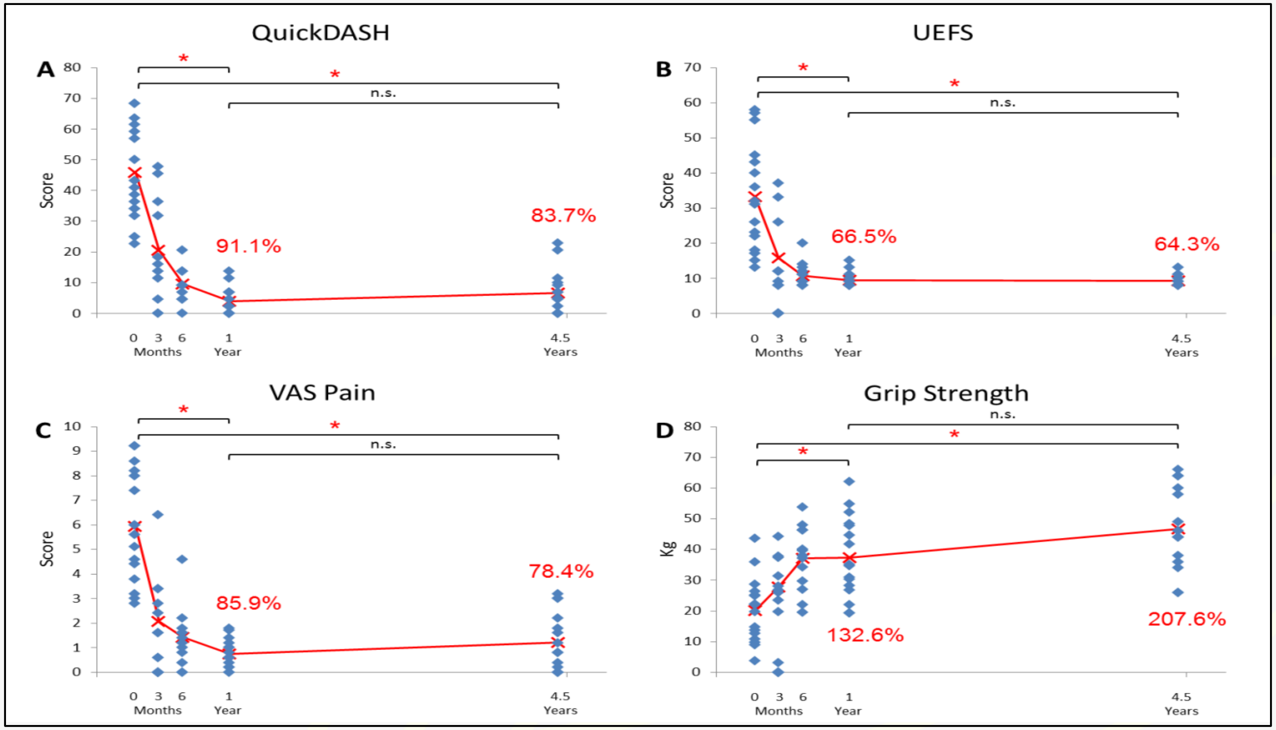
- Lateral Epicondylitis - $700MM market largely dependent on surgery to address recalcitrant long term tendon damage;
- Gluteal tendon - $50MM market based on mechanical stabilization only, with NO effective regenerative treatment;

- Orthocell is currently generating revenue from treatments in Australia and New Zealand, with first patients in Hong Kong
- Initial Australian reimbursement application will be for Lateral Epicondylitis and Gluteal tendon
- Orthocell plan to continue data generation for further product registrations in a variety of tendon models throughout 2016/17
- Targeting international product registrations in Japan in 2016, then EU and USA

Key Applications of Ortho-ATI™

Lateral Epicondylitis (Tennis Elbow)

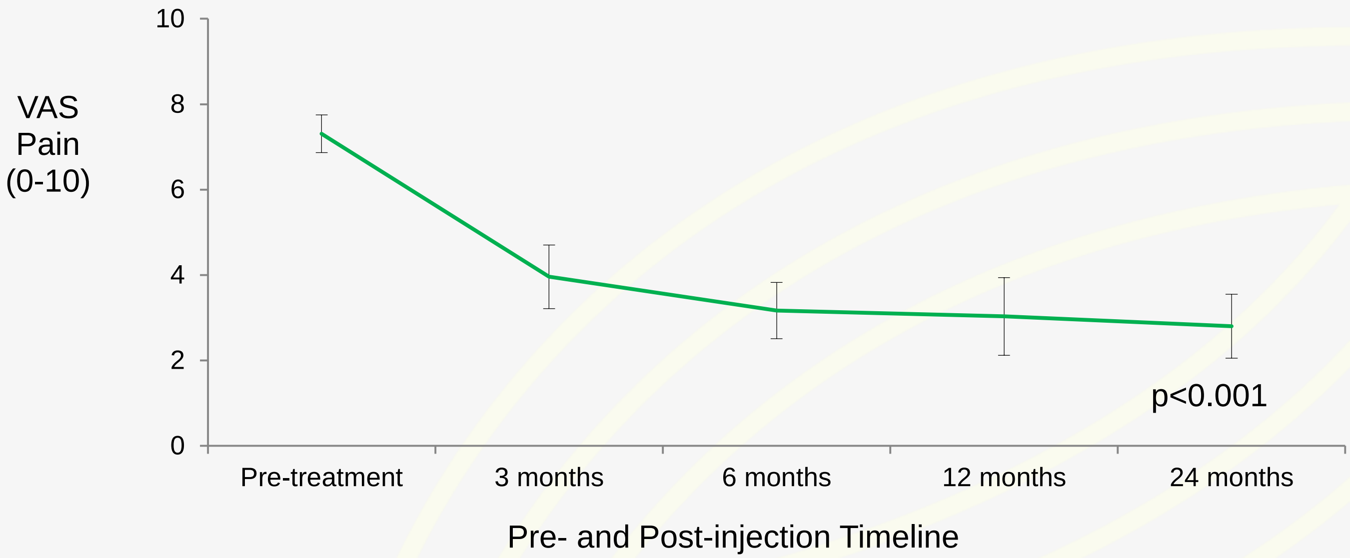
- Ortho-ATI™ can structurally repaired tendon tissue in patients with severe tennis elbow
- Long term data (3-5yrs) demonstrates durability and effectiveness



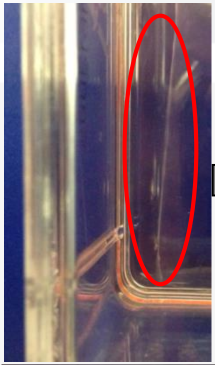
Key Applications of Ortho-ATI™

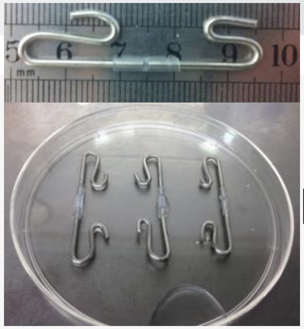
Gluteal Tendinopathy (Hip)

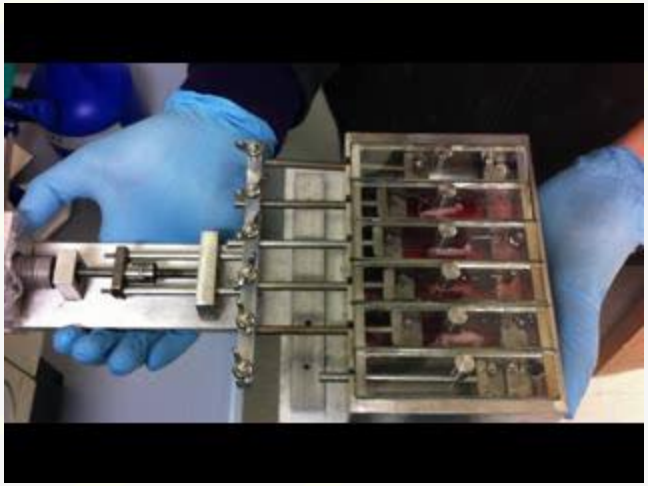
- Common injury in middle aged women with debilitating affect on quality of life and limited surgical success
- Ortho-ATI™ has demonstrated significant clinical improvement at 3 months, maintained to 24 months in treatment resistant patients

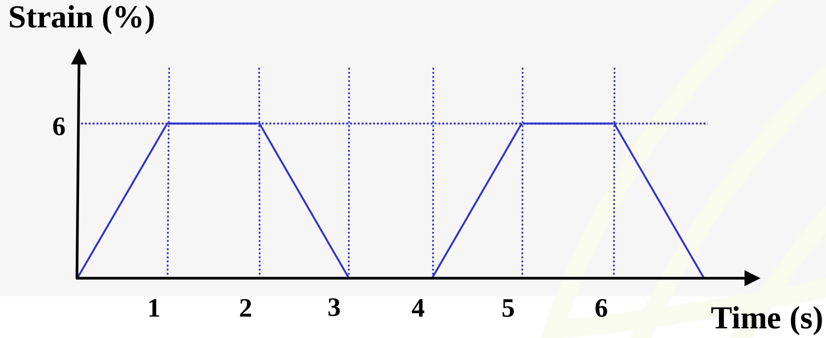


Tendon in a lab – next generation









Growing recognition

- Foster Stockbroking (23.09.2014)*

'With two proprietary , mass market regenerative medicine treatments on the cusp of global commercialisation, we believe OCC is well positioned to transition into a significant player in the Biotech sector'

- Smart Investor, Trevor Hooey's top 10 picks (issued 21.11.2014)*

'Orthocell has been quick to slip into gear after listing on the ASX in August'

> ***"The field of regenerative medicine is reaching a point in its evolution where progress not only seen in headlines, but felt by thousands of patients who are receiving disease-altering therapies every day"***
>
> Alliance for Regenerative Medicine Annual Report 2013

*Full copies of these research notes are available on the Company website www.orthocell.com.au

Upcoming Milestones 2015

ortho·cell

- Commence CelGro™ guided bone repair trial – Q2 2015
- Commence CelGro™ Rotator Cuff clinical trial – Q2 2015
- Commence Ortho-ATI™ Lateral Epicondylitis trial – Q3 2015
- Ortho-ATI trial data Achilles – Q2 2015
- Finalise Bone Support AB collaboration – Q2 2015
- File CelGro™ registration application TGA – Q2 2015
- Secure international partner for Ortho-ATI™/ACI™ - Q4 2015

Investment Highlights

Approved treatments with strong clinical evidence	First tendon and ligament regeneration product approved in a major market
Significant unmet medical need	The market for musculoskeletal conditions in U.S. EU and Japan targeted by Orthocell therapies exceeds $7BB per annum
TGA approved manufacturing facility	Commercial manufacture ongoing in TGA approved cGMP facility
Next product in late stage development	Celgro™ planned for registration application in Q3 2015
Global approvals and expansion underway	Expansion of existing approvals to other international markets underway and first product licensed to China
Team with track record	Team secured approval of Australia's first cell therapy and Board has relevant M&A and licensing experience

Advancing Tissue Repair and Regeneration

Thank you

ASX: OCC

Paul Anderson
Managing Director