

### Market data

EPIC/TKR	COS
Price (p)	5.62
12m High (p)	14.75
12m Low (p)	4.60
Shares (m)	179.6
Mkt Cap (£m)	10.1
EV (£m)	9.1
Free Float*	76%
Market	AIM

\*As defined by AIM Rule 26

### Description

COS develops, manufactures and supplies medical grade collagen biomaterials, tissues and devices. Its products are used in research, *in vitro* diagnostics, medical devices and regenerative medicine. The company provides R&D and contract services to a global and diverse customer base.

### Company information

CEO	Jamal Rushdy
CFO	Gill Black
CSO	Stewart White
Chairman	David Evans

+44 141 648 9100  
www.collagensolutions.co.uk

### Key shareholders

Directors + management	26.0%
Helium Rising Stars	7.6%
Northern Venture Trust	7.4%
Calculus Capital	6.3%
Legal & General	5.8%

### Diary

6 March	General Meeting
July-17	Finals
Aug-17	AGM

### Analysts

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## Collagen Solutions

### Capital increase to support accelerated growth

Collagen Solutions is a biomaterials company developing and manufacturing medical grade collagen components for use in medical devices, research, and regenerative medicine. A number of investment initiatives have been introduced over the last year to accelerate the rate of growth, including global commercial infrastructure and the development of a pipeline of finished medical devices. The company has announced a capital increase, as well as some strategic investor venture debt, to raise gross funds of up to £12.0m to fund these initiatives, with a target of generating a five-fold sales increase over 5 years and profitability in 2019.

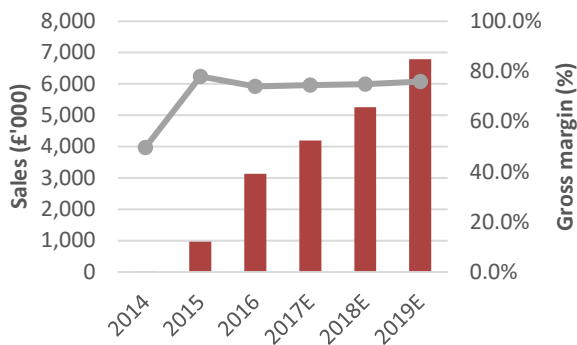
- ▶ **Strategy:** Management has embarked on an investment strategy through a series of initiatives to increase the growth opportunities. This strategy to move COS from a reliable collagen supplier to one that also has proprietary products will move it into profitability and cash generative at a faster pace.
- ▶ **Funding:** COS has announced a Placing and Open offer to raise up to £8.0m of new capital to fund investment and strengthen its balance sheet. Also, it has agreed up to £4.0m of venture debt in three tranches from specialist healthcare investor, Norgine Ventures. Both are conditional on shareholder approval.
- ▶ **Forecasts:** This note is focused on the new funding and the use of proceeds. No changes have been made to our operational forecasts, but EPS figures have been adjusted to reflect the maximum number of shares that could be issued in the Placing/Open offer; and the balance sheet reflects the increased cash and loans.
- ▶ **Risks:** Management has re-iterated its aspirational, but achievable, target to grow sales five-fold within five years. This equates to a demanding CAGR for sales of 38%. Key will be the time it takes to get CE Mark again for ChondroMimetic, targeted for 2H 2017, and signing up a commercial partner.
- ▶ **Investment summary:** Recent interim results provided evidence that the realigned strategy onto an accelerated growth platform was starting to bear fruit. Investment in new opportunities (China JV, Orthomimetics, and additional new products) continues to build a pipeline of strategic relationships that is expected to drive long term growth. This funding is expected to see COS through to profitability in 2019 and cashflow break-even.

### Financial summary and valuation

Year end March (£000)	2014	2015	2016	2017E	2018E	2019E
Sales	24	973	3,130	4,110	5,170	6,720
Underlying EBITDA	-364	-663	-374	-601	73	777
Underlying EBIT	-381	-793	-721	-1,048	-454	231
Underlying PBT	-381	-920	-983	-1,172	-682	33
Statutory PBT	-480	-1,102	-866	-1,222	-732	-17
Underlying EPS (p)	-0.87	-0.98	-0.64	-0.71	-0.26	-0.06
Statutory EPS (p)	-1.10	-1.17	-0.57	-0.74	-0.27	-0.08
Net (debt)/cash	1,492	3,282	2,384	7,513	5,286	4,210
Capital increase	3,374	5,422	207	8,427	1,000	0
P/E (x)	-6.4	-5.8	-8.8	-7.9	-21.6	-0.1
EV/sales (x)	-	7.5	2.3	1.8	1.4	1.1
EV/EBITDA (x)	-	-	-	-	-	11.7

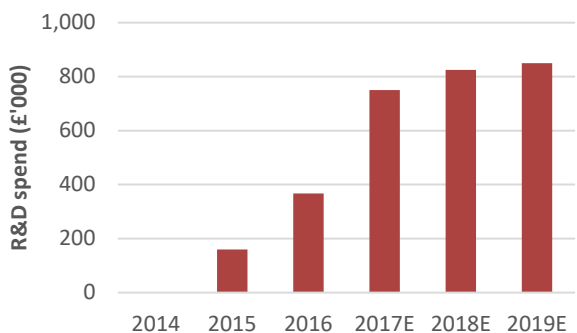
Source: Hardman & Co Life Sciences Research

### Sales & Gross margin



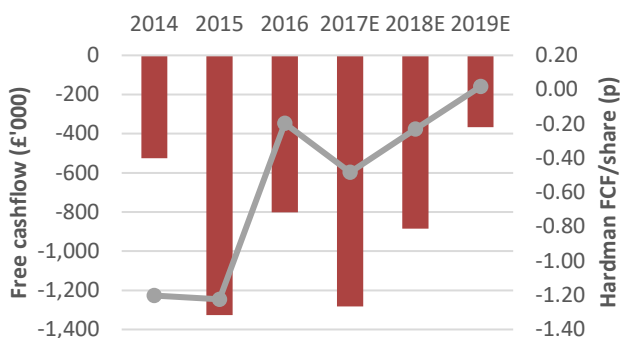
- ▶ Sales are expected to grow substantially as customers receive regulatory approvals and commercial investments realise new business
- ▶ Numerous new opportunities, but timing of their contribution is complex and, therefore, not included in our conservative forecasts
- ▶ The gross margin is dependent on the mix of business – contract manufacturing commands lower margins
- ▶ Gross margin is stable, but is likely to go higher as COS moves up the value chain

### R&D spend



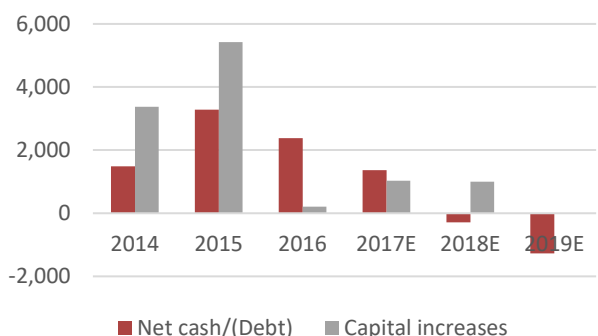
- ▶ COS currently invests about 12% of sales into R&D, but this is modest in absolute terms
- ▶ Investment in R&D spend will rise substantially in order to deliver the strategy of developing 'owned products'
- ▶ COS adds value through development of customer formulations
- ▶ Internal development is capable of supporting some investment in R&D

### Free cashflow



- ▶ Accelerated spend on R&D, China JV and increasing the commercial team to drive medium to long term revenues affects short term cash flow
- ▶ Uncommitted cap-ex investment could be delayed to preserve cash
- ▶ Forecasts are conservatively based with future changes more likely to be upwards with resulting improvement in cashflows
- ▶ Cash position is affected by deferred consideration in 2018 and 2019

### Net cash\*



- ▶ Accelerated R&D and marketing spend is utilising cash that would otherwise be used for deferred considerations
- ▶ Deferred considerations – Southern Lights and CS (US) – will push net cash into a net debt position from 2018
- ▶ Capital increases in 2017 & 2018 currently reflect deferred consideration for acquisition in shares
- ▶ Speed of development of ChondroMimetic programme will determine the timing/need for more cash

\*Figures unadjusted for capital increase and Bond issue

Source: Company data; Hardman & Co Life Sciences Research

## Investment capital

### Capital increase

Collagen Solutions has announced a capital increase up to a total of £12.0m through a conditional Placing and Open offer of Ordinary 1p shares and a Subscription of secured private bonds. Both the issue of shares and the issue of bonds are conditional of receiving shareholder approval at a General Meeting scheduled for 6<sup>th</sup> March 2017. There are three parts to this capital increase:

- ▶ **Placing:** The issue of 123.8m Ordinary shares to existing and new institutional investors at a price of 5p per share (10% discount to the closing price on 9<sup>th</sup> February 2017) to raise gross new funds of £6.2m
- ▶ **Open offer:** The issue of up to 35.9m Ordinary shares at 5p per share to existing shareholders on the basis of 1 new share for every 5 shares currently held to raise up to a further £1.8m, with an over-allotment entitlement
- ▶ **Subscription:** A commitment from specialist healthcare strategic investor, Norgine Ventures, to subscribe for up to £4.0m of senior secured private bonds, in three tranches, and carrying a minimum coupon of 10% per annum (see details below), with warrants attached
- ▶ **EIS/VCT relief:** As part of the Placing, 100.0m shares (80.78%) will be issued to VCT/EIS funds seeking tax relief under UK Government approved Enterprise Investment Scheme. Given that £5.0m investment for these shares has already been procured from participating institutions, EIS relief will not be available in respect of shares issued in the Open Offer
- ▶ **Directors:** Four directors have agreed to subscribe for 20.0m shares, equivalent to £1.0m, in the Placing indicating strong support of the company

#### Directors participation

Director	Existing shareholding	Placing shares	New shareholding	% Enlarged capital
David Evans	18,874,167	16,500,000	35,374,167	10.42%
Malcolm Gillies	1,653,000	2,000,000	3,653,000	1.08%
Jamal Rushdy	0	1,000,000	1,000,000	0.29%
Gill Black	357,143	500,000	857,143	0.25%

Source: Circular; Hardman & Co Life Sciences Research

- ▶ **Shareholder approval:** The issue of shares and bonds are both dependent on shareholder approval at a General Meeting to be held on 6<sup>th</sup> March 2017. Assuming approval is received, the new shares will be admitted to AIM on 7<sup>th</sup> March 2017
- ▶ **Call option:** The Chairman of COS, David Evans, has granted Norgine Ventures a Call option over up to 20.0m shares exercisable in the event that COS undertakes a capital increase of at least £2.0m during the term of the Bonds at an issue price that is lower than the warrant price of 5.911p

#### Potential share capital

Ordinary 1p shares	Number
Existing Ordinary shares of 1p	179,621,290
Number of Placing shares	123,799,999
Number of Open Offer shares	35,924,258
<b>Total shares in issue following Admission</b>	<b>339,345,547</b>

Source: Circular; Hardman & Co Life Sciences Research

## Norgine Ventures<sup>1</sup>

Collagen Solutions has received a commitment from Norgine Ventures to subscribe for up to £4.0m of secured private Bonds and warrants. Norgine Ventures is associated with the fully integrated private European specialty pharmaceutical company, Norgine<sup>2</sup>. Investment activity commenced in 2012 to foster innovation in the healthcare sector and help achieve an improvement in clinical and patient outcomes. To date, Norgine Ventures has committed over €60m to fast-growing healthcare companies – MedTech, Diagnostics, Specialty Pharma – mostly in Europe, and usually in the form of venture debt.

Selected current investments of Norgine Ventures are shown in the table below. In addition, it has successfully invested in the following companies that have all had exits: Stanmore Implants (bought by Stryker, May 2016); Internis (bought by Stada, December 2014); and SpineGuard (IPO Euronext April 2013); and SpineVision (acquired by Norgine itself in September 2016). The activities of most of its investments are in interventional medical devices. Therefore, its proposed investment in Collagen Solutions would be consistent with this strategy.

Norgine Ventures – Current investments				
Company	Country	Activity	Committed	Date
PulseCath	Netherlands	Ventricular assist devices	€3m	Aug-16
Q3 Medical	Germany	Stents & implantable devices	€5m	May-16
SpineVision	France	Spinal implants	€4m	Sep-14
Azanta	Denmark	Specialty Pharma	€7m	Oct-13
Supersonic Imagine	France	Diagnostic ultrasound	€5m	Dec-13
Orteq	UK	Meniscal repair	€2m	July-13
Agendia	Netherlands	Genomic-based diagnostics	*€15m	Mar-13

\*Syndicated

Source: Norgine Ventures; Hardman & Co Life Sciences Research

### Structure of Bonds and Warrants

- ▶ **Tranche 1:** Comprises £2.0m at a coupon of 10% p.a. to be issued in the event of a successful equity fundraise of over £3.5m – i.e. on Admission of the new Ordinary shares in the Placing and Open Offer. The Bond has a term of 42 months and repayable in monthly instalments of interest and capital repayments
- ▶ **Tranche 2:** Comprises £1.0m to be issued at the company's option between 1<sup>st</sup> May 2017 and 31<sup>st</sup> July 2017, provided that COS has achieved certain revenue targets in the 12 months prior to drawdown. The coupon will be the higher of 10% or 935 basis points above the three year GBP swap rate and repayable in a similar way to Tranche 1 over the 42 months following drawdown
- ▶ **Tranche 3:** Comprises £1.0m to be issued at the company's option between 1<sup>st</sup> November 2017 and 31<sup>st</sup> December 2017, conditional on certain revenue or fundraising targets in the 12 months prior to drawdown. The coupon will be the higher of 10% or 935 basis points above the three year GBP swap rate prior to issuance and repayable over the 36 months following drawdown
- ▶ **Warrants:** COS has agreed to issue Norgine Ventures with 10 year Warrants to purchase Ordinary shares, comprising Warrants over 5.1m Ordinary shares and an additional 1.7m Ordinary shares in the event that the company draws down Tranche 3. The exercise price will be 5.911p per Ordinary share
- ▶ **Call option:** Granted by the Chairman and as described above

<sup>1</sup> www.norgineventures.com

<sup>2</sup> www.norgine.com

## Updated balance sheet

On the basis that shareholders approve the capital increase and issuance of the Bonds at the General Meeting, we estimate that COS will have net cash on its balance sheet at its fiscal year end (31<sup>st</sup> March 2017). At 30<sup>th</sup> September 2016, the company had a net cash position of £1.6m, comprising £1.7m cash and less than -£0.1m of debt. Given that management has already adopted the early stages of investment required for its accelerated growth strategy coupled with the development of its own branded products (e.g. ChondroMimetic), we estimate that the cash position had been reduced to £1.1m by the end of December 2016, and will be reduced further, to an estimated £0.3m, by the end of fiscal 2017.

Offsetting this, the Placing and maximum take-up of the Open offer would raise net funds of £7.4m, which will trigger the £2m Tranche 1 issue of the Bonds to Norgine Ventures. Total costs over the three tranches are stated in the Circular at -£200k. Hardman estimates that COS will have (maximum) cash of £9.5m and net cash of £7.5m at the end of March 2017.

### Estimated net cash position @31<sup>st</sup> March 2017

Estimated cash position @ 31 <sup>st</sup> December 2016	£1.1m
Net proceeds from Placing & Open offer*	£7.4m
Net proceeds from issuance of Tranche 1 Bonds	£1.8m
Estimated cash utilisation in 1Q 2017	-£0.8m
<b>Estimated cash position @ 31<sup>st</sup> March 2017</b>	<b>£9.5m</b>
Norgine Ventures Bonds	-£2.0m
<b>Estimated net cash position @ 31<sup>st</sup> March 2017</b>	<b>£7.5m</b>

\*Assumes full take-up of the Open offer

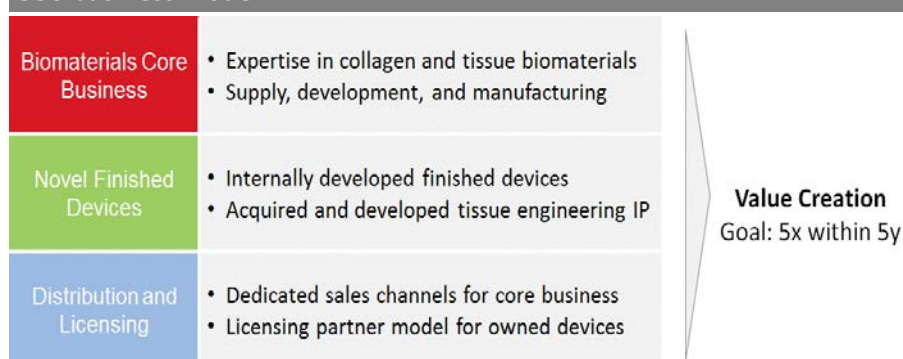
Source: Circular; Hardman & Co Life Sciences Research

## Use of proceeds

In May 2016, Collagen Solutions announced a refocusing of its strategy in order to take advantage of market opportunities and acceleration its growth rate globally. Jamal Rushdy moved from Chief Business Officer to CEO to steer this change, which had three primary objectives in order to achieve management's stated goal to increase sales five-fold over a five year period, equivalent to CAGR of ca.+38%:

- ▶ Development of direct and distributor sales channels for core business
- ▶ Focus on marketing, with a global re-branding
- ▶ Improved execution speed in OEM and R&D

### COS business model



Source: Collagen Solutions

There was clear evidence that implementation of this new strategy was having an effect in the company’s interim results, published in December 2016 (Collagen Solutions: “Interims: Foundations laid for strategic growth”, 21<sup>st</sup> December 2016). It was also clear that the investment being made into marketing infrastructure to expand the global sales of the company’s core business products and services, and early investment into its finished device pipeline, would require a capital increase in the near future.

Collagen Solutions – Use of proceeds		
Core Business Acceleration	<ul style="list-style-type: none"> <li>Commercial team expansion and channel development</li> <li>Scalability in finance, admin, quality, and customer services</li> <li>CAPEX for operations and customer projects</li> </ul>	<ul style="list-style-type: none"> <li>Stronger revenue growth</li> <li>Broader global account base</li> <li>Increased OEM mix/value</li> <li>Development of finished devices</li> </ul>
Finished Device R&D	<ul style="list-style-type: none"> <li>Chondromimetic completion and OUS launch</li> <li>Next-stage finished device pipeline product development</li> <li>R&amp;D expansion to support finished devices pipeline</li> </ul>	
Other Corporate Purposes	<ul style="list-style-type: none"> <li>Deferred consideration for SLB acquisition</li> <li>Working capital and other</li> </ul>	

Source: Collagen Solutions; Hardman & Co Life Sciences Research

### Finished devices

The new strategy emphasised investment in R&D towards production of proprietary finished devices, to be commercialised via a licensing partner model. Our September 2016 report, ‘Focus on R&D’, illustrates that the potential of collagen scaffolds in medical devices and research is recognised by funding bodies, with multiple cross-sector research grants now awarded by the European Commission and others.

COS is also investing in later stage R&D. Three finished device projects are underway, based on COS’ in-licensed Orthomimetics product family, and others in the wound care and orthopaedics markets. Near-term, there is tremendous effort and investment to get an updated CE Mark for ChondroMimetic, for cartilage repair.

Collagen Solutions – Finished pipeline development		
ChondroMimetic™ Cartilage Repair	Fibrillar Collagen Wound Treatment	Bone Graft Substitutes Bone Regeneration
<ul style="list-style-type: none"> <li>Previously used in Europe, 6+ years evidence in patients</li> <li>Retro study and CE mark in process, targeted for 1H 2017</li> <li>Potential 250,000 cartilage procedures (\$300+ million market)</li> </ul>	<ul style="list-style-type: none"> <li>Potential to address multiple markets in wound care and burns</li> <li>Target wound market clearance in 2018</li> <li>Addresses c.40% of \$1 billion market</li> </ul>	<ul style="list-style-type: none"> <li>Provisional patent filed December, 2016</li> <li>Target orthopaedic market clearance in 2018</li> <li>Addresses c.30% of 1.7 billion market</li> </ul>

Source: Collagen Solutions

## Financial summary

- ▶ Forecasts are unchanged from our previously published numbers. However, the EPS does reflect the capital increase, and the balance sheet reflects the increased cash and debt as highlighted earlier in this report
- ▶ Forecasts will be revised in full once the result of the Open offer is known

Profit & Loss account						
Year end March (£000)	2014	2015	2016	2017E	2018E	2019E
<b>Profit &amp; Loss:</b>						
Sales	24	973	3,130	4,110	5,170	6,720
COGS	-12	-214	-811	-1,070	-1,319	-1,648
<b>Gross profit</b>	<b>12</b>	<b>759</b>	<b>2,319</b>	<b>3,041</b>	<b>3,850</b>	<b>5,072</b>
Gross margin (%)	49.7%	78.0%	74.1%	74.0%	74.5%	75.5%
SG&A	-376	-1,325	-2,440	-2,991	-3,102	-3,595
R&D	0	-160	-367	-750	-825	-850
<b>EBITDA</b>	<b>-364</b>	<b>-663</b>	<b>-374</b>	<b>-601</b>	<b>73</b>	<b>777</b>
EBITDA margin (%)	-	-	-	-	1.4%	11.6%
Depreciation	-17	-130	-347	-447	-527	-547
EBIT	<b>-381</b>	<b>-793</b>	<b>-721</b>	<b>-1,048</b>	<b>-454</b>	<b>231</b>
EBIT margin (%)	-	-	-	-	-8.8%	3.4%
Net interest	0	-128	-262	-124	-229	-203
<b>Pre-tax profit</b>	<b>-381</b>	<b>-920</b>	<b>-983</b>	<b>-1,172</b>	<b>-682</b>	<b>28</b>
Tax	0	-21	-114	-148	-193	-241
Net income	-381	-942	-1,097	-1,320	-875	-213
Weighted av. shares (m)	43.7	96.4	171.2	185.4	340.0	347.6
<b>Underlying EPS (p)</b>	<b>-0.87</b>	<b>-0.98</b>	<b>-0.64</b>	<b>-0.71</b>	<b>-0.26</b>	<b>-0.06</b>
Fully diluted EPS (p)	-0.87	-0.98	-0.64	-0.71	-0.26	-0.06
<b>Balance sheet:</b>						
Share capital	683	1,755	1,759	1,759	1,839	1,919
Reserves	5,573	11,099	12,137	18,039	16,683	16,281
Provisions	0	285	253	449	337	253
Debt	0	109	109	2,109	4,109	4,109
less: Cash	1,492	3,391	2,493	9,622	9,395	8,319
<b>Invested capital</b>	<b>7,174</b>	<b>14,176</b>	<b>14,203</b>	<b>15,172</b>	<b>14,810</b>	<b>14,271</b>
Net cash/debt	1,492	3,282	2,384	7,513	5,286	4,210
<b>Cashflow:</b>						
Operating profit	-381	-793	-721	-1,797	-867	96
Working capital	-86	-228	422	-461	-213	-151
Tax & interest	0	-28	-191	-106	-104	-159
<b>Operational cashflow</b>	<b>-525</b>	<b>-1,180</b>	<b>-338</b>	<b>-2,118</b>	<b>-858</b>	<b>333</b>
Capital expenditure	0	-159	-464	-153	-169	-200
<b>Free cashflow</b>	<b>-525</b>	<b>-1,326</b>	<b>-801</b>	<b>-2,271</b>	<b>-1,027</b>	<b>133</b>
Acquisitions	-1,357	-2,192	-207	-1,027	-2,200	-1,209
Share issues	3,374	5,422	207	8,427	1,000	0
<b>Change in net debt</b>	<b>1,492</b>	<b>1,790</b>	<b>-898</b>	<b>5,129</b>	<b>-2,227</b>	<b>-1,076</b>
Hardman FCF/sh. (p)	-1.20	-1.22	-0.20	-1.23	-0.48	0.18

Source: Hardman & Co Life Sciences Research

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