Analysis of the Wound Care Market

March 2015: Market Analysis





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Wound Care Market Analysis

Wound care companies are consolidating their position in the market through geographic and portfolio expanding acquisitions.

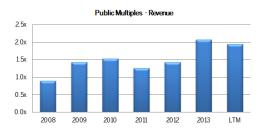
Overview

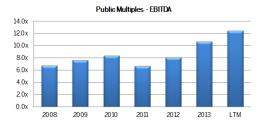
The global wound care industry is currently valued at \$20 billion and is expected to grow at a CAGR of 7% for the next four years to reach approximately \$26 billion by 2018.

Median comparable public company multiples are currently tracking at 1.9x latest twelve months revenue while median EBITDA multiples in the same period are 12.4x. There has been a 37% and 55% increase in the sales and EBITDA multiples respectively since 2012.

Median transaction revenue multiples in the last two years are tracking at 4.0x while EBITDA multiples are at 10.9x.

The Wound Care Index has been largely tracking the S&P 500 but has consistently outperformed the S&P 500 since the beginning of 2013.





Trends

Recent M&A transactions in the wound care industry show an ongoing trend of companies looking to deepen and strengthen their portfolio through acquisitions.

Most recently in February 2015, Medtronic closed its acquisition of Covidien, the second largest player in the wound care market, for \$48 billion. Covidien, based in Ireland, had a 11.4% market share in 2013.

In September 2014 Kinetic Concepts (KCI), LifeCell and Systagenix came together to form Acelity, a global leader in advanced wound care therapeutics and regenerative medicine.

Last year Cardinal made two acquisitions in the wound care space. In May 2014, Cardinal acquired Access Closure, a manufacturer and distributor of extravascular closure devices in the United States. This was followed by Cardinal's acquisition of Innovative Therapies, a negative pressure wound therapy company, in September 2014.

Similarly, there has also been strong interest from private equity investors. In July 2014 Clayton, Dubilier & Rice (CD&R) acquired Healogics, the nation's largest provider of advanced wound care services with nearly 600 hospital outpatient wound care centers. CD&R believes outpatient wound care services is a large, underserved market with sustainable long-term growth.

Overall, the wound care industry is showing renewed signs of growth as the demand for the products remain strong due to the aging population. There will also be a shift in focus in the coming years towards advanced wound care products including biological dressings and negative pressure wound therapy devices.



Wound Care Index

Below is an index of selected medical reprocessing companies compared to the S&P 500 over the past five years.



*Wound Care Index includes: Advanced Medical Solutions Group plc, Anika Therapeutics Inc., Apex Medical Corp., Biotec Pharmacon ASA, Collplant Holdings Ltd., Coloplast A/S, CryoLife Inc., Derma Sciences Inc., Hill-Rom Holdings, Inc., Nissan Medical Industries Ltd., Nuo Therapeutics, Inc., Paul Hartmann AG, Smith & Nephew plc Source: Capital IQ

Comparable Company Analysis

Below is a snapshot of selected companies in the wound care market.

Company	Price	52-Week		EV*	Net Debt	Market Cap	EV/Sales			EV/EBITDA		
company	THEE	High	Low		Net Debt	Market Oap	2012	2013	LTM	2012	2013	LTM
Advanced Medical Solutions Group plc	\$ 2.19	\$ 2.19	\$ 1.65	\$ 437.0	\$ (17.4)	\$ 454.4	2.7x	3.8x	4.2x	9.8x	14.2x	15.4x
Anika Therapeutics Inc.	\$ 39.69	\$ 51.40	\$ 34.16	\$ 443.2	\$ (106.9)	\$ 550.1	1.4x	6.3x	4.2x	3.8x	12.7x	6.7x
Apex Medical Corp.	\$ 1.84	\$ 2.11	\$ 1.05	\$ 150.5	\$ (11.1)	\$ 154.3	1.4x	1.3x	2.0x	8.9x	9.5x	12.4x
Biotec Pharmacon ASA	\$ 2.05	\$ 3.21	\$ 1.37	\$ 77.9	\$ (11.8)	\$ 89.6	NA	NA	NA	NA	NA	NA
Collplant Holdings Ltd.	\$ 0.13	\$ 0.13	\$ 0.04	\$ 27.7	\$ (3.9)	\$ 31.6	NA	NA	NA	NA	NA	NA
Coloplast A/S	\$ 77.89	\$ 82.47	\$ 61.14	\$ 16,473.5	\$ (42.4)	\$ 16,515.9	5.1x	6.2x	8.0x	14.9x	17.5x	21.8x
CryoLife Inc.	\$ 10.53	\$ 12.29	\$ 8.40	\$ 266.2	\$ (33.4)	\$ 299.5	1.2x	2.1x	1.8x	9.0x	14.7x	17.9x
Derma Sciences Inc.	\$ 8.14	\$ 15.01	\$ 7.88	\$ 122.3	\$ (84.5)	\$ 206.8	2.2x	2.0x	1.5x	NA	NA	NA
Hill-Rom Holdings, Inc.	\$ 47.86	\$ 49.33	\$ 35.45	\$ 3,166.2	\$ 468.6	\$ 2,697.6	1.2x	1.5x	1.8x	6.9x	10.4x	11.2x
Nissan Medical Industries Ltd.	\$ 5.53	\$ 5.57	\$ 3.73	\$ 122.5	\$ 56.2	\$ 50.6	0.6x	NA	0.9x	4.3x	NA	5.6x
Nuo Therapeutics, Inc.	\$ 0.27	\$ 0.67	\$ 0.23	\$ 15.1	\$ (19.8)	\$ 34.8	NA	NA	NA	NA	NA	NA
Paul Hartmann AG	\$ 378.99	\$ 381.23	\$ 297.14	\$ 1,503.1	\$ 121.7	\$ 1,345.1	0.6x	0.6x	0.6x	6.6x	6.7x	6.3x
Smith & Nephew plc	\$ 18.32	\$ 18.71	\$ 13.26	\$ 18,022.4	\$ 1,612.0	\$ 16,410.4	2.3x	3.0x	3.9x	8.0x	10.6x	13.2x

		EV/Sales			EV/EBITDA		
		2012	2013	LTM	2012	2013	LTM
*Enterprise Value (EV) = market capitalization + debt + minority interest Ma	laximum	5.1x	6.3x	8.0x	14.9x	17.5x	21.8x
All currency figures in USD. Price figures in actual dollars; EV, Net Debt, and Market Cap in millions Me	lean	1.9x	3.0x	2.9x	8.0x	12.0x	12.3x
Market Cap and Enterprise Value as of 03/04/2015 Me	ledian	1.4x	2.1x	1.9x	8.0x	11.6x	12.4x
Note: Normalized to exclude certain outliers.	linimum	0.6x	0.6x	0.6x	3.8x	6.7x	5.6x

Source: Capital IQ



Comparable Transaction Analysis

Below is a snapshot of selected transactions in the wound care market.

Closing Date	Target	Buyer	Transaction Description	Total Trans. Value (\$m)	Enterprise Value (\$m)	EV*/ Revenues	EV*/ EBITDA
3/2/2015	First Water Limited	Scapa Group plc (AIM:SCPA)	The acquisition of First Water helps Scapa enhance its offerings in advanced woundcare and expand its global footprint. First Water designs, develops, manufactures, and markets wound dressings and skin adhesives for OEMs in the United Kingdom and internationally.	23.5	23.5	NA	NA
1/26/2015	Covidien plc	Medtronic, Inc. (nka:Medtronic plc) (NYSE:MDT)	The acquisition of Covidien, a leading global health care products company and manufacturer of medical devices/supplies, creates significant tax advantages for Medtronic by shifting its domicile to Dublin, Ireland.	48,056.4	46,878.4	4.5x	16.8x
12/31/2014	Smith & Nephew plc (LSE:SN), Certain Assets of Advanced Wound Management Business	Schweitzer-Mauduit International Inc. (NYSE:SWM)	The acquisition of Smith & Nephew's Advanced Wound Management segment offers a range of initial wound bed preparation and full wound closure products to Schweitzer-Mauduit.		NA	NA	NA
11/21/2014	Southern Lights Ventures 2002 Limited	Collagen Solutions PLC (AIM:COS)	The acquisition of Southern Lights, a producer and supplier of biomaterials for medical device manufacturers, provides security of high grade collagen supply to Collagen Solutions.	9.4	9.4	4.7x	22.2x
9/30/2014	Innovative Therapies, Inc.	Cardinal Health, Inc. (NYSE:CAH)	The acquisition of Innovative Therapies, a negative pressure wound therapy company, expands Cardinal health's medical products segment.		NA	NA	NA
9/16/2014	Touchless Care Concepts	Crawford Healthcare Holdings	The acquisition of Touchless Care Concepts, a skin protection product company, allows Crawford Healthcare to leverage Touchless' sales force. Additionally, Crawford obtains Touchless Care's popular patented spray products.		NA	NA	NA
7/2/2014	Healogics, Inc.	Clayton, Dubilier & Rice, Inc.	CD&R believes Healogics is a market leader in hospital outpatient wound care services, a large, underserved market with sustainable long-term growth. Healogics operates nearly 600 hospital outpatient wound care centers, or one-third of all such centers in the U.S.		910.0	3.0x	NA
5/12/2014	AccessClosure, Inc.	Cardinal Health, Inc. (NYSE:CAH)	The acquisition of AccessClosure, a leading manufacturer and distributor of extravascular closure devices in the United States, is aligned to Cardinal's targeted growth areas.		320.0	4.0x	NA
5/5/2014	Choice Therapeutics, Inc.	Alliqua, Inc. (NasdaqCM:ALQA)	The acquisition of Choice Therapeutics, a provider of wound care products for burns, advanced wound care, and surgical site infections primarily in the United States, adds to Alliqua's product portfolio. The main product is TheraBond 3D.		11.9	6.5x	NA
4/23/2014	Tenaxis Medical, Inc.	The Medicines Company (NasdaqGS:MDCO)	The acquisition of Tenaxis Medical, manufacturer of a mechanical human tissue and artificial grafts sealent, grows The Medicines Company's presence in surgical and perioperative care.	170.0	170.0	NA	NA
1/22/2014	Shire Regenerative Medicine, Inc., Dermagraft Assets	Organogenesis Inc.	The acquisition of Dermagraft Assets along with Shire's Regenerative Medicine divison strengthens Organogenesis' position in the chronic wound care and skin regenerative divisions.	300.0	NA	NA	NA
12/11/2013	Shaanxi Reshie Biotech Co. Ltd	China Bio-Med Regeneration Technology Limited	Shaanxi Reshine Biotech offers bio-medical engineering, research and development of regnerative medical products in relation to tissue-engineering technology.	2.4	29.0	NA	NA
12/9/2013	Archimed LLP	Crawford Healthcare Holdings Limited	Crawfords' acquisiton of Archimed gives them access to two Advanced Wound Care brands (lodozyme and Oxyzyme) which use cutting edge patented technology to kill infections in wounds and aid wound healing.		NA	NA	NA
10/28/2013	Systagenix Wound Management, Limited	Acelity L.P. Inc.	The acquisition of Systagenix by KCL enhances its' position as a leader in the advanced wound diagnostic and therapeutic solutions divisions.	485.0	485.0	2.5x	NA
10/10/2013	Wound Management Technologies, Inc.	Brookhaven Medical, Inc.	The acquisition of Wound Management Technologies allows Brookhaven Medical to capture significant sales in the advanced woundcare industry.	NA	NA	NA	NA
9/24/2013	Grupo Neve	BSN Medical GmbH & Co. KG	This acquisition gives BSN an entry into the Brazilian market in the wound care and orthopedics areas.	NA	NA	NA	NA
8/19/2013	Medafor, Inc.	CR Bard Inc. (NYSE:BCR)	The acquisition provides Bard with a proprietary technology platform for its surgical specialty product offering and provides a global footprint for continued expansion, Medafor's Arista® MPH Hemostat provides strong synergy with Bard's Progel® Sealant technology and sales channel.	280.0	280.0	NA	NA
8/8/2013	Exciton Technologies, US Operations	York Pharma plc	Crawford Healthcare (sub of York Pharma plc) acquired rights to sell advanced woundcare products into US markets and exclusively licence Exciton's patented Exsalt anti-microbial woundcare technology.	NA	NA	NA	NA
7/17/2013	OroGen Bio Sciences, Inc.	Celling Biosciences, LLC	The acquisition helps Celling further its position as a leader in autologous cell therapy.	NA	NA	NA	NA
5/13/2013	Theragenics Corp. (NYSE:TGX) (Announced)	Juniper Investment Company, LLC	Juniper acquired the remaining 92.92% stake in Theragenics. Theragenics is a medical device company that manufactures wound closure, vascular access and specialty needle products.	85.8	53.5	0.7x	5.8x
5/8/2013	First Water Heathcote Ltd.	Ambu A/S (CPSE:AMBU B)	The acquisition of First Water Heathcote, a manufacturer of hydrogel for dressings and wound healing, helps strengthen the gel component of Ambu's ECG elctrode manufacturing business.		2.8	NA	NA
5/6/2013	HemCon Medical Technologies, Inc.	Tristar Wellness Solutions Inc.	Tristar acquired HemCon to utilize its' ongoing revenue base and significant near - long term growth potential. HemCon gives Tristar a route through which it can grow its' consumer and professional wound care portfolio.	43.6	41.8	8.4x	NA



Comparable Transaction Analysis

Closing Date	Target	Buyer	Transaction Description	Total Trans. Value (\$m)	Enterprise Value (\$m)	EV*/ Revenues	EV*/ EBITDA
4/24/2013	ORTHOCON, Inc.	Abyrx, Inc.	By acquiring ORTHOCON, INC. Abyrx gains the right to develop, manufacture and commercilize Bezwada Biomedical's polyurethane bone application technology under ORTHOCON's license agreement.	NA	NA	NA	NA
3/22/2013	HemCon Medical Technologies, Inc.	Tristar Wellness Solutions Inc. (OTCPK:TWSI)	Tristar will use HemCon as its platform to grow is consumer and professional wound care portfolio.	42.4	42.0	8.5x	NA
3/15/2013	Angel Biomedical Ltd.	Collbio Ltd.	Collbio, a company set up by leading life science financiers, DiagnosticCapital Ltd, acquired the assets of Angel Biomedical. Collbio sees opportunity for growth as collagen is used worldwide as an established biomaterial across a wide range of therapeutic and diagnostic applications.	NA	NA	NA	NA
3/15/2013	Ark Therapeutics Limited and Lymphatix Oy	Wölbern Private Equity GmbH	Ark Therapeutics Ltd. operates as a biotechnology company and Lymphatix Ltd. operates as a drug development company.		2.0	0.7x	NA
2/12/2013	Lotus Tissue Repair, Inc.	Shire plc	Shire plc is using the acquisition of Lotus Tissue Repair, Inc. to develop its' revolutionary protein replacement therapy which is aimed to treat dystrophic epiermolysis bullosa, a genetic condition that causes fragile skin.	324.0	324.0	NA	NA
12/20/2012	First Care Products Ltd.	PerSys Medical Company	PerSys Medical, the exclusive North American distributor of The Emergency Bandage®acquired the product's manufacturer, First Care Products Ltd. The acquisition will merge the worldwide marketing and sales operations of the two companies.	NA	NA	NA	NA
12/18/2012	MoMelan Technologies, Inc.	Acelity L.P. Inc.	KCI aims to use the acquisition of MoMelan to enhance its' position in the epidermal grafting market where it believes significant growth opportunities lie.	22.5	22.5	NA	NA
12/3/2012	Healthpoint, Ltd.	Smith & Nephew plc	The acquisition of Healthpoint, Ltd provides Smith & Nephew plc with an opportunity to strengthen it's position in advanced wound care.	782.0	782.0	5.2x	NA
11/19/2012	BioMimetic Therapeutics Inc.	Wright Medical Group Inc. (NasdaqGS:WMGI)	The transaction combines BioMimetic's biologics platform and pipeline with Wright's established sales force and product portfolio, to further growth. BioMimetic Therapeutics develops products for the healing of musculoskeletal injuries and diseases.	377.0	332.7	NA	NA
10/19/2012	NeoMend	CR Bard Inc. (NYSE:BCR)	The acquisition will provide Bard with a leading technology platform for surgical sealants and adhesion barrier products.	165.0	165.0	NA	NA
8/7/2012	BSN Medical GmbH	EQT Partners AB	BSN is one of the world's leading suppliers of wound care, compression therapy, and orthopaedic products to hospitals, pharmacies and sanitary shops. EQT Partners sees growth potential in entering new geographic markets, especially in Asia and Latin America.	2,274.3	2,274.3	2.7x	10.9x
8/6/2012	Lantor UK Ltd.	BFF Technical Fabrics	Lantor UK produces healing products for hospitals and clinics. It offers orthopedic undercast padding bandages and absorbent dressings.	NA	NA	NA	NA
7/25/2012	Aspen Surgical Products Inc.	Hill-Rom Holdings, Inc. (NYSE:HRC)	Through the acquisition of Aspen Surgical, Hill-Rom is well positioned for growth and geographic expansion of their surgical business.	400.0	400.0	3.3x	10.5x
7/2/2012	ThermoGenesis Corp., CryoSeal Fibrin Sealant System	Asahi Kasei Corporation (TSE:3407)	Asahi exercised its option to acquire the CryoSeal line and to commercialize the product in the would care market.	2.0	NA	NA	NA
					Max	8.5x	22.2x

*Enterprise Value (EV) = market capitalization + debt + minority interest. Source: Capital IQ

Max	8.5x	22.2x
Mean	4.2x	13.2x
Median	4.0x	10.9x
Min	0.7x	5.8x