DI DAWSONJAMES

INSTITUTIONAL RESEARCH Medical Devices update report

Member FINRA/SIPC

Toll-Free: 866-928-0928 • www.DawsonJames.com • 101 North Federal Highway - Suite 600 • Boca Raton, FL 33432

Arch Therapeutics (OTCqb: ARTH)

BUY: AC5 - Gradual Launch is Progressing

Arch is developing an innovative platform of peptides to seal and protect bleeding, leaking, and injured tissues in a range of procedures. The initial product is based on the AC5, a self-assembling peptide technology platform, which rapidly generates nanofiber networks that control the movement of fluids and substances while enabling healing. The product is now approved in the U.S., and commercialization has begun. The E.U. is next. As resources allow, we expect to see indications expand and new products emerge from the pipeline.

An Effective Barrier and Scaffold that Promotes Healing. The company's flagship product is based on its AC5 self-assembling peptide (SAP) technology platform. The platform includes AC5 Advanced Wound System and AC5 Topical Hemostat, which have received marketing authorization as medical devices in the United States and Europe, respectively, and which are intended for skin applications, such as management of complicated chronic wounds or acute surgical wounds. The AC5 platform is a biocompatible peptide that is synthesized from proteogenic, naturally occurring L-amino acids. Unlike products that contain traditional peptide sequences, when applied to a wound, AC5-based products intercalate into the interstices of the connective tissue and self-assemble into a protective physical-mechanical nanoscale structure that can provide a barrier to leaking substances, such as blood, while also acting as a biodegradable scaffold that enables healing. Self-assembly is a central component of the mechanism of action.

Commercializing Begins. The launch is underway and as we have expected, it's gradual. We expect it to build slowly over time. The company's strategy is to drive use with key opinion leaders and early adopters. The company is prioritizing its focus on private and government facilities. Hospitals in the Veterans Health Administration tend to have many patients whose needs may be applicable to AC5. The company has also engaged with third parties in the United States, from distributors to contract organizations, consultants, advisors, scientists, clinicians, and/or other collaborators.

Modest Expectations: We assume a very slow and gradual market share build in the U.S. and E.U. Initially, the focus is likely to be on the dermatological sciences area, which we think of as outside the body versus Biosurgery (inside the body). We assume pricing in-line with the competitive market place \$2500-\$3,000 for a 2x2 area (4 cm sq area) versus AC5 as a liquid application.

Valuation: We project detailed revenue assumptions in our model out to 2031. We assume a royalty model -30% net to Arch in our product models. We apply a 30% risk rate in our Free Cash Flow to the Firm (FCFF), discounted EPS (dEPS), and Sum-of-the-Parts (SOP) models, which are then equal-weighted and averaged and rounded to the nearest whole number to derive our 12-month projected price target of \$3.00.

Risks to our thesis include: (1) commercial; (2) financial; (3) intellectual property; and (4) OEM and/or manufacturing. We review these risks in the Risks Analysis section of this report.

December 17, 2021

Jason H. Kolbert jkolbert@dawsonjames.com

Current Price Price Target			\$0.12 \$3.00
Estimates	2022E	2023E	2024E
Expenses (\$000s)	\$6,331	\$8,247	\$51,172
1Q December	\$1,583	\$2,030	\$11,908
2Q March	\$1,646	\$2,128	\$12,862
3Q June	\$1,583	\$2,046	\$12,350
4Q September	\$1,519	\$2,043	\$14,052
Estimates	2022E	2023E	2024E
Revenues (\$000s)	\$0	\$16,000	\$442,662
1Q December	\$0	\$3,680	\$101,812
2Q March	\$0	\$4,000	\$110,666
3Q June	\$0	\$3,840	\$106,239
4Q September	\$0	\$4,480	\$123,945
	2022E	2023E	2024E
EPS (diluted)	(\$0.03)	\$0.03	\$1.48
1Q December	(\$0.01)	\$0.01	\$0.34
2Q March	(\$0.01)	\$0.01	\$0.37
3Q June	(\$0.01)	\$0.01	\$0.35
4Q September	(\$0.01)	\$0.01	\$0.41
Stock Data	(+)		
52-Week Range	\$0.06	-	\$0.20
Shares Outstanding (mil.)	<i>J</i> 0.00	-	236.7
Market Capitalization (mil	1		\$28
	•)		\$28
Enterprise Value (mil.)			
Debt to Capital			0%
Book Value/Share			\$0.01
Price/Book			-
Average Three Months Tra	ading Volum	e (K)	82
Insider Ownership			13.5%
Institutional Ownership			0.0%
Short interest (mil.)			-
Dividend / Yield			\$0.00/0.0%
Arch Therapeutics, Inc.	c. (ARTH)	Driver	
Volume (Thousands)		Price (USD)
Volume — Arch T	herapeutics, Inc.		0.2
			0.2
			0.16
			0.10
T \ \^			0.12
		MPW	0.12
8,000	ALAN V		0.08
			0.06
Jan Feb Mar Apr Ma	av Jun Jul Au	Sep Oct N	lov Dec
and the man reprinted			ctSet Prices

DI DAWSONJAMES

Model Assumptions

- We assume a typical use will cost between \$2,500 and \$3,000, which represents a 2cm x 2cm treatment area.
- Our Therapeutic models for both the U.S. and Europe have a 90% risk cut applied to the revenue projections. This is in addition to the risk rate (30%) applied in our valuation metrics.
- Our market share assumptions for all indications are modest at single-digit percentages. We assume the current markets are entrenched with well-funded competitors. As such, potential market share build is likely to build slowly.
- We model the U.S. and Europe and the dermatological and Biosurgery individual markets.

							Ma	rket M	lodels									
Surgery: AC5 Surgical Hemostat and Sealant (Europe)	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Annual surgical procedures Increase in procedures	60,000,000 0.05%	60,030,000 0.05%	60,060,015 0.05%	60,090,045 0.05%	60,120,090 0.05%	60,150,150 0.05%	60,180,225 0.05%	60,210,315 0.05%	60,240,420 0.05%	60,270,541 0.05%	60,300,676 0.05%	60,330,826 0.05%	60,360,992 0.05%	60,391,172 0.05%	60,421,368 0.05%	60,451,578 0.05%	60,481,804 0.05%	60,512,045 0.05%
General surgical procedures (excluding cosmetic plastic surgery) Laproscopic procedures (25%) Non-laproscopic general procedures (75%)	48,000,000 12,000,000 36,000,000	48,024,000 12,006,000 36,018,000	48,048,012 12,012,003 36,036,009	48,072,036 12,018,009 36,054,027	48,096,072 12,024,018 36.072,054	48,120,120 12,030,030 36,090,090	48,144,180 12,036,045 36,108,135	48,168,252 12,042,063 36,126,189	48,192,336 12,048,084 36,144,252	48,216,433 12,054,108 36,162,324	48,240,541 12,060,135 36,180,406	48,264,661 12,066,165 36,198,496	48,288,793 12,072,198 36,216,595	48,312,938 12,078,234 36,234,703	48,337,094 12,084,274 36,252,821	48,361,263 12,090,316 36,270,947	48,385,443 12,096,361 36,289,083	48,409,636 12,102,409 36,307,227
Market penetration (Laproscopic)	1,100,000	1,100,550	1,101,100	1,101,651	1,102,202	1,102,753 0.00%	1,103,304	1,103,856	1,104,408	1,104,960	1,105,512	1,106,065	1,106,618	1,107,171	1,107,725 1.20%	1,108,279	1,108,833	1,109,387 1.80% 1.80%
Market penetration (non-laproscopic) Market penetration (plastic surgery)						0.00%	0.00%	0.00% 0.00% 0.00%	0.00% 0.00% 0.00%	0.00% 0.00% 0.00%	0.40% 0.40% 0.40%	0.60%	0.80% 0.80% 0.80%	1.00% 1.00% 1.00%	1.20% 1.20%	1.40% 1.40% 1.40%	1.60% 1.60% 1.60%	1.80%
Laproscopic procedures using AC5 Non-laproscopic procedures using AC5 Plastic surgery using AC5								-	-	-	48,241 144,722 4,422	72,397 217,191 6,636	96,578 289,733 8,853	120,782 362,347 11,072	145,011 435,034 13,293	169,264 507,793 15,516	193,542 580,625 17,741	217,843 653,530 19,969
Total procedures using AC5 Total procedures using AC5 Cost per Unit (typical patienty may use up to 5 units)									2,000 \$	2,020 \$	4,422 197,384 1,500 \$	296,224 1,515 \$	395,163 1,530 \$	494,201 1,545 \$	593,338 1,561 \$	692,574 1,577 \$	791,908	891,342 1,608
Price increase AC5 revenue (\$000)							1%	1%	1%	1%	1% 296,076 \$	1% 448,780 \$	1% 604,659 \$	1% 763,764 \$	1% 926,145 \$	1% 1,091,853 \$	1%	1% 1,433,460
Risk Reduction Source: Daw son James research	90%				\$				- \$	- \$	29,608 \$	44,878 \$	60,466 \$	76,376 \$	92,614 \$	109,185 \$	1,260,940 \$ 126,094 \$	143,346
Surgery: AC5 Surgical Hemostat and Sealant (US)	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Annual surgical procedures Increase in procedures General surgical procedures (excluding cosmetic plastic surgery)	51,000,000 0.05% 40,800,000	51,025,500 0.05% 40.820,400	51,051,013 0.05% 40,840,810	51,076,538 0.05% 40,861,231	51,102,077 0.05% 40.881,661	51,127,628 0.05% 40,902,102	51,153,191 0.05% 40.922,553	51,178,768 0.05% 40,943,014	51,204,357 0.05% 40,963,486	51,229,960 0.05% 40,983,968	51,255,575 0.05% 41.004,460	51,281,202 0.05% 41.024.962	51,306,843 0.05% 41.045,474	51,332,496 0.05% 41.065.997	51,358,163 0.05% 41,086,530	51,383,842 0.05% 41,107,073	51,409,534 0.05% 41,127,527	51,435,238 0.05% 41,148,191
Laproscopic procedures (25%) Non-laproscopic general procedures (75%)	10,200,000	10,205,100	10,210,203 30,630,608	10,215,308	10,220,415	10,225,526	40,922,555 10,230,638 30,691,915	10,235,754 30,707,261	10,240,871 30,722,614	10,245,992 30,737,976	10,251,115 30,753,345	10,256,240 30,768,721	10,261,369 30,784,106	10,266,499 30,799,498	10,271,633	10,276,768	10,281,907 30,845,720	10,287,048
Plastic surgery	1,100,000	1,100,550	1,101,100	1,101,651	1,102,202	1,102,753	1,103,304	1,103,856	1,104,408	1,104,960 0.00% 0.00%	1,105,512 0,20% 0,20%	1,106,065	1,106,618	1,107,171 0.80% 0.80%	1,107,725	1,108,279 1,20% 1,20%	1,108,833	1,109,387 1.60% 1.60%
Market penetration (con-taproscopic) Market penetration (plastic surgery)						0.00%	0.00%	0.00%	0.00%	0.00%	0.20%	0.40%	0.60%	0.80%	1.00%	1.20%	1.40% 1.40% 1.40%	1.60%
Laproscopic procedures using AC5 Non-laproscopic procedures using AC5											20,502 61,507	41,025 123,075	61,568 184,705	82,132 246,396	102,716 308,149	123,321 369,964	143,947 431,840	164,593 493,778
Plastic surgery using AC5 Total procedures using AC5											2,211 84,220	4,424	6,640 252,913	8,857 337,385	11,077 421,943	13,299 506,584	15,524 591,310	17,750 676,121
Cost per procedure Price increase						1%	1%	1%	2,500 \$	2,525 \$ 1% - \$	2,550 \$ 1% 214,782 \$	2,576 \$ 1%	2,602 \$ 1% 657,955 \$	2,628 \$ 1% 886.488 \$	2,654 \$ 1% 1,119,751 \$	2,680 \$ 1% 1.357,817 \$	2,707 \$ 1% 1.600.761 \$	2,734 1%
AC5 revenue (\$000) Revenue (\$000) Risk Reduction	90%				\$				- 5	- \$	214,782 \$ 214,782 \$ 21,478 \$	434,076 \$ 434,076 \$ 43,408 \$	657,955 \$ 65,795 \$	886,488 \$ 886,488 \$ 88,649 \$	1,119,751 \$ 111,975 \$	1,357,817 \$ 1,357,817 \$ 135,782 \$	1,600,761 \$	1,848,660 1,848,660 184,866
Source: Daw son James research 25%	50%				•					••	21,476 \$	43,406 \$	65,795 \$	66,643 \$	111,975 \$	135,762 \$	160,076 \$	104,005
Diabetic ulcers; AC5 Surgical Hemostat and Sealant (EU) Diabetes (incidence)	2014E 40,000,000	2015E 40,020,000	2016E 40,040,010	2017E 40,060,030	2018E 40,080,060	2019E 40,100,100	2020E 40,120,150	2021E 40,140,210	2022E 40,160,280	2023E 40,180,360	2024E 40,200,451	2025E 40,220,551	2026E 40,240,661	2027E 40,260,781	2028E 40,280,912	2029E 40,301,052	2030E 40,321,203	2031E 40,341,363
Increase incidence Diabetic foot ulcers (15%)	0.05% 6,000,000	0.05% 6,003,000	0.05% 6,006,002	0.05% 6,009,005	0.05% 6,012,009	0.05% 6,015,015	0.05% 6,018,023	0.05% 6,021,032	0.05% 6,024,042	0.05% 6,027,054	0.05% 6,030,068	0.05% 6,033,083	0.05% 6,036,099	0.05% 6,039,117	0.05% 6,042,137	0.05% 6,045,158	0.05% 6,048,180	0.05% 6,051,205
Market penetration Patients treated with AC5 Cost per treatment					0%	0%	0.0%	0.0%	0.0% - S	1% 60,271 2,500 \$	1% 60,301 2,525 \$	2% 120,662 2,550 \$	2% 120,722 2,576 \$	2% 120,782 2,602 \$	3% 151,053 2,628 \$	3% 151,129 2,654 \$	3% 151,205 2,680 \$	3% 151,280 2,707
Increase in price Revenue				1	1% s - s	1%	1%	1% - 5	1%	1% 150,676 \$	1% 152,259 \$	1% 307,717 \$	1% 310,950 \$	1% 314,216 \$	1% 396,897 \$	1% 401,066 \$	1% 405,279 \$	1% 409,537
Risk Adjusted Revenue (000)					s - s	90%	90%	90%	90%	90% 15,068 \$	90% 15,226 \$	90% 30,772 \$	90% 31,095 \$	90% 31,422 \$	90% 39,690 \$	90% 40,107 \$	90% 40,528 \$	90% 40,954
Source: Dawson James research																		
Diabetic ulcers; AC5 Surgical Hemostat and Sealant (US)	2014E	2015E 29.014.500	2016E	2017E	2018E	2019E	2020E	2021E 29.101.652	2022E 29.116.203	2023E 29.130.761	2024E 29.145.327	2025E 29.159.899	2026E 29.174.479	2027E 29.189.067	2028E 29.203.661	2029E 29.218.263	2030E 29.232.872	2031E
Diabetic foot ulcers (15%)	29,000,000 0.05% 4,350,000	29,014,500 0.05% 4,352,175	29,029,007 0.05% 4,354,351	29,043,522 0.05% 4,356,528	29,058,044 0.05% 4,358,707	29,072,573 0.05% 4,360,886	29,087,109 0.05% 4,363,066	29,101,652 0.05% 4,365,248	29,116,203 0.05% 4,367,430	29,130,761 0.05% 4,369,614	29,145,327 0.05% 4,371,799	29,159,899 0.05% 4,373,985	29,174,479 0.05% 4,376,172	29,189,067 0.05% 4,378,360	29,203,661 0.05% 4,380,549	29,218,263 0.05% 4,382,739	29,232,872 0.05% 4,384,931	29,247,488 0.05% 4,387,123
Market penetration Patients treated with AC5					0%	0%	0.0%	0.0%	0.0%	1% 43,696	1% 43.718	2% 87,480	3% 131,285	3% 131,351	3% 131,416	4% 175,310	4% 175,397	4% 175,485
Cost per treatment Increase in price					1%	1%	1%	\$ 1%	2,500 \$ 1%	2,525 \$ 1%	2,550 \$ 1%	2,576 \$ 1%	2,602 \$ 1%	2,628 \$ 1%	2,654 \$ 1%	2,680 \$ 1%	2,707 \$ 1%	2,734 1%
Revenue Risk Adjusted				1	s - s	- \$ 90%	90%	90%	- \$ 90%	110,333 \$ 90%	111,492 \$ 90%	225,326 \$ 90% 22,533 \$	341,540 \$ 90%	345,128 \$ 90%	348,753 \$ 90%	469,889 \$ 90%	474,825 \$ 90%	479,813 90% 47,981
Revenue (000) Source: Dawson James research					s - s			; - S	- S	11,033 \$	11,149 \$	22,533 \$	34,154 \$	34,513 \$	34,875 \$	46,989 \$	47,483 \$	47,981
Venous ulcers; AC5 Surgical Hemostat and Sealant (US) US population	2014E 316.100.000	2015E 316.258.050	2016E	2017E 316.574.387	2018E 316,732,674	2019E 316.891.041	2020E 317,049,486	2021E 317.208.011	2022E 317.366.615	2023E	2024E 317.684.061	2025E 317,842,903	2026E 318,001,824	2027E 318.160.825	2028E 318,319,906	2029E 318.479.066	2030E 318.638.305	2031E 318,797,624
Increase in population People with venous incompetence (10%)	0.05% 31,610,000	0.05% 31,625,805	0.05% 31,641,618	0.05% 31,657,439	0.05% 31,673,267	0.05% 31,689,104	0.05% 31,704,949	0.05% 31,720,801	0.05% 31,736,661	0.05% 31,752,530	0.05% 31,768,406	0.05% 31,784,290	0.05% 31,800,182	0.05% 31,816,083	0.05% 31,831,991	0.05% 31,847,907	0.05% 31,863,831	0.05% 31,879,762
Incididence of venous ulcer (2.6%) Market penetration	821,860	822,271	822,682	823,093	823,505 0%	823,917 0%	824,329 0%	824,741 0%	825,153 0%	825,566 1%	825,979 1%	826,392 2%	826,805 2%	827,218 2%	827,632 2%	828,046 3%	828,460 3%	828,874 4%
Patients treated with AC5 Cost per treatment					•	•	•			8,256 2,525 \$	8,260 2,550 \$	16,528 2,576 \$	16,536 2,602 \$	16,544 2,628 \$	16,553 2,654 \$	24,841 2,680 \$	24,854 2,707 \$	33,155 2,734
Increase in price Treatments per patient Revenue					1% 2 \$-\$	1% 2	1% 2	1% 2 5 - 5	1% 2 ; \$	1% 2 41,691 \$	1% 2 42,129 \$	1% 2 85,143 \$	1% 2 86,038 \$	1% 2 86,941 \$	1% 2 87,855 \$	1% 2 133,167 \$	1% 2 134,565 \$	1% 2 181,305
Risk Adjusted Revenue (000)					• • •	90%	90%	90%	90%	41,691 \$ 90% 4169 \$	42,129 \$ 90% 4 213 \$	90% 8.514 \$	90% 8 604 \$	90%	90%	90%	90%	90%
Source: Dawson James research										4,105 \$	4,215 \$	0,514 0	0,004 0	0,004 0	0,705 \$	13,317 Q	10,401	10,131
Venous ulcers; AC5 Surgical Hemostat and Sealant (EU)	2014E 742,000,000	2015E 742,371,000	2016E 742,742,186	2017E 743,113,557	2018E 743,485,113	2019E 743,856,856	2020E 744,228,784	2021E 744,600,899	2022E 744,973,199	2023E 745,345,686	2024E 745,718,359	2025E 746,091,218	2026E 746,464,263	2027E 746,837,496	2028E 747,210,914	2029E 747,584,520	2030E 747,958,312	2031E 748,332,291
Europe population Increase in population People with venous incompetence (10%)	0.05%	0.05% 74,237,100	0.05% 74,274,219	743,113,557 0.05% 74,311,356	0.05% 74,348,511	743,836,856 0.05% 74,385,686	0.05% 74,422,878	0.05% 74,460,090	0.05% 74,497,320	0.05% 74,534,569	0.05% 74,571,836	0.05% 74,609,122	746,464,263 0.05% 74,646,426	0.05% 74,683,750	0.05% 74,721,091	0.05% 74,758,452	0.05% 74,795,831	0.05% 74,833,229
Incididence of venous ulcer (2.6%) Market penetration	1,929,200	1,930,165	1,931,130	1,932,095	1,933,061	1,934,028	1,934,995 0.0%	1,935,962 0.0%	1,936,930	1,937,899	1,938,868 1%	1,939,837 2%	1,940,807 2%	1,941,777 3%	1,942,748 3%	1,943,720 3%	1,944,692 4%	1,945,664
Patients treated with AC5 Cost per treatment									2,500 \$	19,379 2,525 \$	19,389 2,550 \$	38,797 2,576 \$	38,816 2,602 \$	58,253 2,628 \$	58,282 2,654 \$	58,312 2,680 \$	77,788 2,707 \$	77,827 2,734
Increase in price Treatments per patient				1	s . s	1%	1% 2	1% 2 5 - 5	1% 2 ; \$	1% 2 97,864 \$	1% 2	1% 2 199,862 \$	1% 2 201,961 \$	1% 2 306,124 \$	1% 2 309,340 \$	1% 2 312,590 \$	1% 2 421,164 \$	1% 2
Revenue Risk Adjusted Revenue (000)					• • •	90%	90%	90%	90%	97,864 \$ 90%	98,892 \$ 90%	199,862 \$ 90%	201,961 \$ 90%	306,124 \$ 90%	309,340 \$ 90%	312,590 \$ 90% 31,259 \$	421,164 \$ 90% 42,116 \$	425,589 90% 42,559
Source: Daweon James research					• • •				• •	5,706 \$	3,003 \$	13,366 \$	20,196 \$	30,012 a	30,934 \$	31,259 \$	42,110 3	42,009
Pressure ulcers; ; AC5 Surgical Hemostat and Sealant (US)	2014E	2015E	2016E	2017E	2018E	2019E	2020E 317,049,486	2021E	2022E 317,366,615	2023E 317,525,298	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
US population Increase in population	316,100,000 0.05%	316,258,050 0.05%	316,416,179 0.05%	316,574,387 0.05%	316,732,674 0.05%	316,891,041 0.05%	0.05%	2021E 317,208,011 0.05%	0.05%	0.05%	317,684,061 0.05%	317,842,903 0.05%	318,001,824 0.05%	318,160,825 0.05%	318,319,906 0.05%	318,479,066 0.05%	318,638,305 0.05%	318,797,624 0.05%
Incidence of pressure ulcer (0.8%) Market penetration	2,528,800	2,530,064	2,531,329	2,532,595	2,533,861 0%	2,535,128 0%	2,536,396 0.0%	2,537,664 0.0%	2,538,933 0%	2,540,202 1%	2,541,472 2%	2,542,743 2%	2,544,015 2%	2,545,287 3%	2,546,559 3%	2,547,833 4%	2,549,106 4%	2,550,381 4%
Patients treated with AC5 Cost per treatment						•	•			25,402 2,525 \$	50,829 2,550 \$	50,855 2,576 \$	50,880 2,602 \$	76,359 2,628 \$	76,397 2,654 \$	101,913 2,680 \$	101,964 2,707 \$	102,015 2,734
Increase in price Treatments per patient					2	1% 2	1%	1%	1% 2	1% 2								
Rvenue Risk Adjusted Revenue (000)	_		_	1	• • \$	90%	90%	90%	90%	128,280 \$ 90% 12,828 \$	259,256 \$ 90% 25,926 \$	261,979 \$ 90% 26,198 \$	264,731 \$ 90% 26,473 \$	401,268 \$ 90% 40,127 \$	405,484 \$ 90% 40,548 \$	546,324 \$ 90% 54,632 \$	552,063 \$ 90% 55,206 \$	557,863 90% 55,786
Source: Dawson James research										12,020 \$	23,920 \$	13,120 \$	20,413 \$	-0,127 \$	-0,240 \$	J4,032 \$		55,766
Pressure ulcers; ; AC5 Surgical Hemostat and Sealant (EU)	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
US population Increase in population	742,000,000 0.05%	742,371,000 0.05%	742,742,186 0.05%	743,113,557 0.05%	743,485,113 0.05%	743,856,856 0.05%	744,228,784 0.05%	744,600,899 0.05%	744,973,199 0.05%	745,345,686 0.05%	745,718,359 0.05%	746,091,218 0.05%	746,464,263 0.05%	746,837,496 0.05%	747,210,914 0.05%	747,584,520 0.05%	747,958,312 0.05%	748,332,291 0.05%
Incidence of pressure ulcer (0.8%) Market penetration	5,936,000	5,938,968	5,941,937	5,944,908	5,947,881 0%	5,950,855 0.0%	5,953,830 0%	5,956,807 0.0%	5,959,786 0%	5,962,765 1%	5,965,747 2%	5,968,730 <u>3%</u>	5,971,714 3%	5,974,700 <u>3%</u>	5,977,687 <u>3%</u>	5,980,676 <u>3%</u>	5,983,666 <u>3%</u>	5,986,658 <u>3%</u>
Patients treated with AC5 Cost per treatment Increase in price						-	1%	- 1%		59,628 2,525 \$ 1%	119,315 2,550 \$ 1%	179,062 2,576 \$ 1%	179,151 2,602 \$ 1%	179,241 2,628 \$ 1%	179,331 2,654 \$ 1%	179,420 2,680 \$ 1%	179,510 2,707 \$ 1%	179,600 2,734 1%
Increase in price Treatments per patient Revenue					\$. \$.\$	1% 2	2	2	1% 2 ; - \$	1% 2 301,120 \$	1% 2 608,566 \$	1% 2 922,438 \$	1% 2 932,128 \$	1% 2 941,920 \$	1% 2 951,815 \$	1% 2 961,814 \$	1% 2 971,918 \$	1% 2 982,128
Risk Adjusted Revenue (000)				1	- · › 5 - \$	90%	90%	90%	90%	301,120 \$ 90% 30,112 \$	90% 60,857 \$	922,438 \$ 90% 92,244 \$	932,128 \$ 90% 93,213 \$	941,920 \$ 90% 94,192 \$	951,815 \$ 90% 95,182 \$	961,814 \$ 90% 96,181 \$	971,918 \$ 90% 97,192 \$	982,128 90% 98,213
Source: Dawson James research																		
Revenue Summary (000)	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
AC5 Surgical (US) AC5 Surgical (EU) AC5 Wound Sealent (US)	\$1 \$1 \$-	s - s - s -	5 - 1 5 - 1 5 - 1		s - s s - s	- 1	:		- \$ - \$	- \$ - \$ \$	21,478 \$ 29,608 \$ 41,288 \$	43,408 \$ 44,878 \$ 57,245 \$	65,795 \$ 60,466 \$ 69,231 \$	88,649 \$ 76,376 \$ 83,334 \$	111,975 \$ 92,614 \$ 84,209 \$	135,782 \$ 109,185 \$ 114,938 \$	160,076 \$ 126,094 \$ 116,145 \$	184,866 143,346 121,898
ACS Wound Sealent (EU) Net Revenues	\$ - \$ 2	s - s -	s - 1 \$ - 1	; . ; . !	s - s				· \$	\$ - \$	85,972 \$ 178,345 \$	143,002 \$ 288,532 \$	144,504 \$ 339,996 \$	156,226 \$ 404,585 \$	165,805 \$ 454,604 \$	167,547 \$ 527,452 \$	179,836 \$ 582,152 \$	181,725
Source: Dawson James es	timate																	



Risk Analysis

Commercial risk. The focus of the company is on successfully developing its products and bringing them to the market. Competition may be intense from external players as well as customers who choose to "build it themselves."

Financial risk. The company may need to raise capital in the marketplace relatively soon. There can be no assurance that the company will be able to raise capital and do so on favorable terms successfully.

Intellectual property risk. The company may have to defend its patents and technical know-how, and there can be no assurances that the patents will not be infringed or will be held as valid if challenged, and the company may infringe on third parties' patents.

OEM and or manufacturing risk. Original Equipment Manufacturers (OEMs) may decide to make products themselves, and, as such, terminate production contracts before completion, creating revenue shortfalls. Manufacturing risks include the ability to produce and do so in a competitive, timely, and efficient way.



Exhibit 1. Income Statement

Arch Therapeutics, Inc.: Income Statement (\$000)	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep		Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep										
Arch Therapeutics, Inc.: YE September 30	1Q21A	2Q21A	3Q21A	4Q21E	2021E	1Q22E	2Q22E	3Q22E	4Q22E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Product sales																			
AC5 (US) Dermatologic Science											12,000	21,478	43,408	65,795	88,649	111,975	135,782	160,076	184,866
AC5 (EU) " "	-	-	-	-	-	-	-	-	-	-	4,000	29,608	44,878	60,466	76,376	92,614	109,185	126,094	143,346
AC5 (US) BioSurgery											-	178,345	288,532	339,996	404,585	454,604	527,452	582,152	121,898
AC5 (EU) "											-	85,972	143,002	144,504	156,226	165,805	167,547	179,836	181,725
Total Product Sales	-	1	-	-	-	-	-	-	-	-	16,000	442,662	720,066	906,743	725,836	824,999	939,966	1,048,158	631,835
Expenses																			
Cost of Goods Sold		1	-	-	-	-	-	-	-	-	1,600	44,266	72,007	90,674	72,584	82,500	93,997	104,816	63,184
%C	OGS 10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Research and Development	344	410	297	350	1,401	368	382	368	353	1,471	1,544	2,007	2,610	3,392	4,410	4,631	4,862	5,105	5,361
%	R&D																		
General and Administrative	919	1,339	1,370	1,000	4,628	1,215	1,264	1,215	1,166	4,860	5,103	4,899	4,703	4,515	4,650	4,790	5,029	5,281	5,545
%5	G&A																		
Total expenses	1,263	1,760	1,667	1,350	6,029	1,583	1,646	1,583	1,519	6,331	8,247	51,172	79,319	98,582	81,644	91,920	103,888	115,202	74,089
Operating Income (Loss)	(1,263)	(1,750)	(1,667)	(1,350)	(6,029)	(1,583)	(1,646)	(1,583)	(1,519)	(6,331)	7,753	391,490	640,747	808,162	644,192	733,078	836,078	932,956	557,747
Interest expense																			
Fair value of derivative liabilities in excess of proceeds		(41)	(40)																
Gain on exercise of warrants			178																
Loss on warrant derivative modification																			
Loss on issuance of warrants																			
Adjustments of fair value of derivative																			
Other income																			
Total other income	109	(41)	138	-		-	-					-		-	-	-	-	-	-
Pretax Income	(1,263)	(1,791)	(1,529)	(1,350)	(6,029)	(1,583)	(1,646)	(1,583)	(1,519)	(6,331)	7,753	391,490	640,747	808,162	644,192	733,078	836,078	932,956	557,747
Income Tax Benefit (Provision)	-	-	-		-	(79)	(82)	(79)	(76)	(317)	620	39,149	76,890	113,143	128,838	175,939	234,102	279,887	178,479
Tax Rate	0%	0%	0%	0%	0%	5%	5%	5%	5%	5%	8%	10%	12%	14%	20%	24%	28%	30%	32%
GAAP Net Income (loss)	(1,154)	(1,791)	(1,529)	(1,350)	(6,029)	(1,503)	(1,564)	(1,503)	(1,443)	(6,014)	7,133	352,341	563,857	695,019	515,354	557,140	601,976	653,069	379,268
GAAP-EPS	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)	0.03	1.48	2.36	2.89	2.14	2.30	2.48	2.68	1.55
GAAP EPS (dil)	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)	0.03	1.48	2.36	2.89	2.14	2.30	2.48	2.68	1.55
Wgtd Avg Shrs (Bas) - '000s	193,044	213,337	236,719	256,956	225,014	236,000	236,236	236,472	236,709	236,354	237,301	238,252	239,206	240,164	241,126	242,092	243,062	244,036	245,014
Watd Avg Shrs (Dil) - '000s	193,044	213,337	236,719	256,956	225,014	236,000	236,236	236,472	236,709	236,354	237,301	238,252	239,206	240,164	241,126	242,092	243,062	244,036	245,014

Source: Dawson James estimates



Companies mentioned in this report:

Important Disclosures:



<u>Price target and ratings changes over the past three years:</u> Initiated – Buy – May 5, 2021 – Price Target \$3.00 Update Report – Buy – December 17, 2021 – Price Target \$3.00

Dawson James Securities, Inc. (the "Firm") is a member of the Financial Industry Regulatory Authority ("FINRA") and the Securities Investor Protection Corporation ("SIPC").

The Firm does not make a market in the securities of the subject company(s). The Firm has not engaged in investment banking relationships with the subject company in the prior twelve months, as a manager or co-manager of a public offering and has not received compensation resulting from those relationships. The Firm may seek compensation for investment banking services in the future from the subject company(s). The Firm has not received any other compensation from the subject company(s) in the last 12 months for services unrelated to managing or co-managing of a public offering.

Neither the research analyst(s) whose name appears on this report nor any member of his (their) household is an officer, director, or advisory board member of these companies. The Firm and/or its directors and employees may own securities of the company(s) in this report and may increase or decrease holdings in the future. As of November 30, 2021, the Firm as a whole did not beneficially own 1% or more of any class of common equity securities of the subject company(s) of this report. The Firm, its officers, directors, analysts, or employees may affect transactions in and have long or short positions in the securities (or options or warrants related to those securities) of the company(s) subject to this report. The Firm may affect transactions as principal or agent in those securities.

Analysts receive no direct compensation in connection with the Firm's investment banking business. All Firm employees, including the analyst(s) responsible for preparing this report, may be eligible to receive non-product or service-specific monetary bonus compensation that is based upon various factors, including total revenues of the Firm and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report.

Although the statements in this report have been obtained from and are based upon recognized statistical services, issuer reports or communications, or other sources that the Firm believes to be reliable, we cannot guarantee their accuracy. All opinions and estimates included in this report constitute the analyst's judgment as of the date of this report and are subject to change without notice.

The securities of the company discussed in this report may be unsuitable for investors depending on their specific investment objectives and financial position. This report is offered for informational purposes only and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction where such would be prohibited. Additional information is available upon request.

Ratings Definitions:

- 1) **Buy**: The analyst believes the price of the stock will appreciate and produce a total return of at least 20% over the next 12-18 months.
- 2) **Neutral**: The analyst believes the price of the stock is fairly valued for the next 12-18 months.
- 3) **Sell**: The analyst believes the price of the stock will decline by at least 20% over the next 12-18 months and should be sold.

The following chart reflects the range of current research report ratings for all companies, followed by the analysts of the Firm. The chart also reflects the research report ratings relating to those companies for which the Firm has performed investment banking services.

Current as of	14-Det-21			
	Company		Investment	
	Coverage		Banking	
				% of
Ratings Distribution	# of Companies	% of Total	# of Companies	Totals
Market Outperform (Buy)	25	68%	5	20%
Market Perform (Neutral)	12	32%	0	0%
Market Underperform (Sell)	0	0%	0	0%
Total	37	100%	5	14%

Current as of... 14-Dec-21

Analyst Certification:

The analyst(s) whose name appears on this research report certifies that 1) all of the views expressed in this report accurately reflect his (their) personal views about any and all of the subject securities or issuers discussed; and 2) no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst in this research report; and 3) all Dawson James employees, including the analyst(s) responsible for preparing this research report, may be eligible to receive non-product or service-specific monetary bonus compensation that is based upon various factors, including total revenues of Dawson James and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report.