

Align Technology (NASDAQ: ALGN)

Recommendation: Short

Price Target: \$140 (51% return)

April 2019

Allison Zhao

akzhao@gmail.com

All prices are quoted as of market close on Thursday, April 4th, 2019

ALGN Company Overview

Company Description

- **Manufacturer and distributor of Invisalign orthodontic aligners and iTero digital scanners**
- **Until recently, ALGN enjoyed 80%+ market share in the clear aligner market**
- **Beginning in September 2017, several of ALGN's key patents expired**



5-Year Trading History



Key Stats

Share Price (4/4/19)	\$ 288.0
Diluted S/O	80.9
Market Cap (\$ mm)	23,308.3
(+) Debt	0.0
(-) Cash	(636.9)
Enterprise Value (\$ mm)	22,671.4
52W High / Low	\$398.88 / \$177.92
Avg. Daily Volume (\$mm)	306.0

Business Overview

Investment Thesis

Thesis Support

Catalysts / Risks

Valuation

Investment Thesis

- 1 Market still does not fully appreciate the commodity-nature of clear aligners and the degree to which ALGN has been shielded by now-expired patents**
- 2 Street estimates don't capture the extent of pricing pressure from mix headwinds and escalating competitive pressures**
- 3 Investors are overestimating the size of ALGN's moat in terms of brand equity and the efficacy of their go-to-market strategy**

1 Key patents have expired

“We had 10 to 15 key patents burn off at the last -- last part of last year and I call those CAD/CAM patents which means you could design something on a computer screen and then 3D print it and **that's what choked most companies from getting into the marketplace** because you really couldn't scale.”

–Joseph Hogan, CEO, July 2018

Key Expired Patents	Examples of Remaining Patents
US6309215B1 (exp. Oct 2017) – creating a clear aligner based on tooth molds as alternative to braces	US6227850B1 (will exp. May 2019)* – using a computer to create a successive plan for repositioning teeth after receiving initial digital dataset
US5975893A (exp. Oct 2017) – system for repositioning the teeth using succession of individual appliances	WO2018187434A1 (pending) – method for inkjet printing onto aligner
US6664986B1 (exp. May 2018) – using computer to create, store, and view a 3D dental model that shows how teeth would move	US20180228359A1 (pending) – cheek retractor with markings to determine tooth size and attached arm to hold mobile device
US6334853B1 (exp. May 2018) – method for obtaining 3D dental occlusion map	US20160199157A1 (pending) – mandibular advancement and retraction via bone anchoring devices

Overview

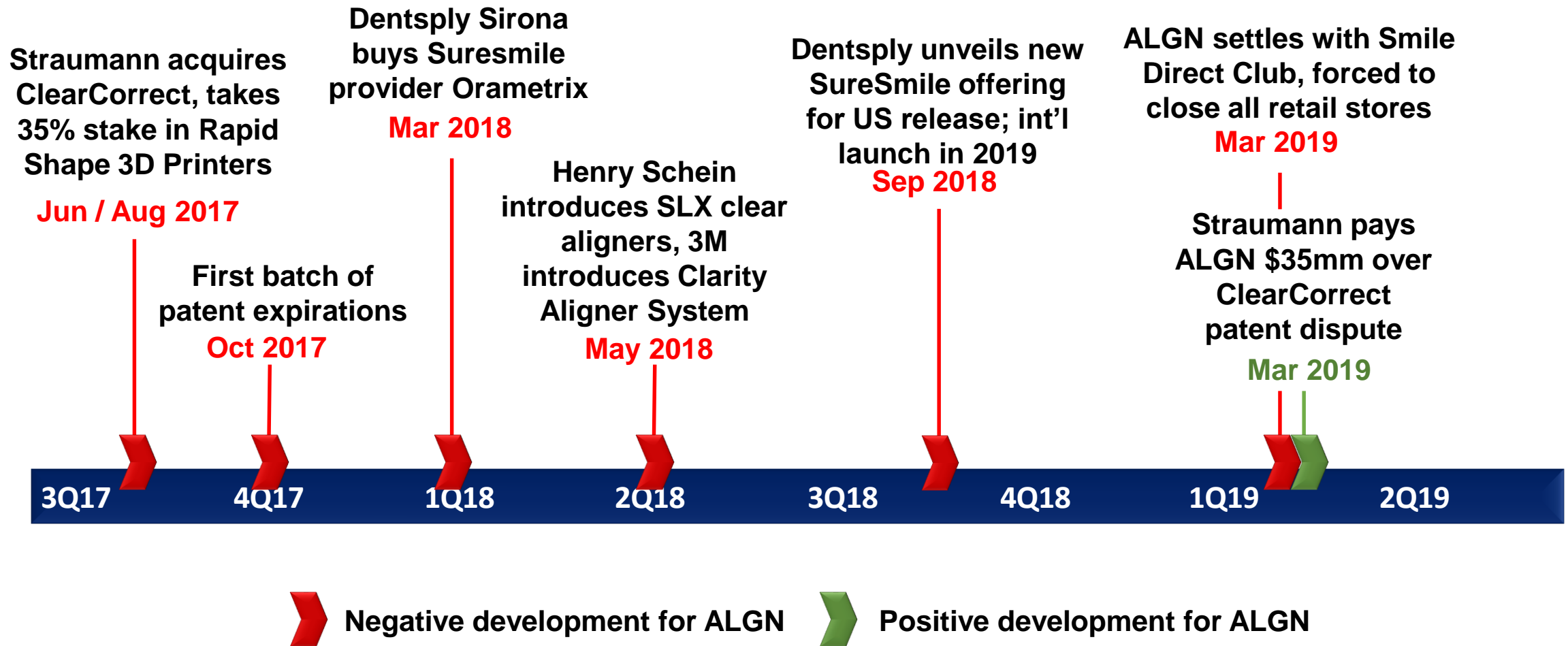
Investment Thesis

Investment Support

Catalysts / Risks

Valuation

1 Timeline of Key Events



1 Barriers to entry keep getting lower

With the advent of accessible 3D printing, dentists and orthodontists have more options



3D Printer
\$4,430



Thermoformer
\$2,600



Aligner Plastic
\$4 / sheet

VS

Invisalign

- Pay \$1,700+ per patient case for aligners and lab fees
- Have to purchase iTero scanner (3Shape and other scanners no longer interoperable)

“If [orthodontists] don’t already have one, the rest are looking into buying a 3D printer, because they only cost \$3350 and Invisalign costs \$1750/patient.”

– Andrew Mart, Founder of ArchForm

“In my office I divide up who to send aligners to based on complexity. A year and a half or more: send to Invisalign. 6 months to a year and a half: exceed-ortho.com and less than 6 months.. Archform.”

–August de Oliveira, DDS, April 2018

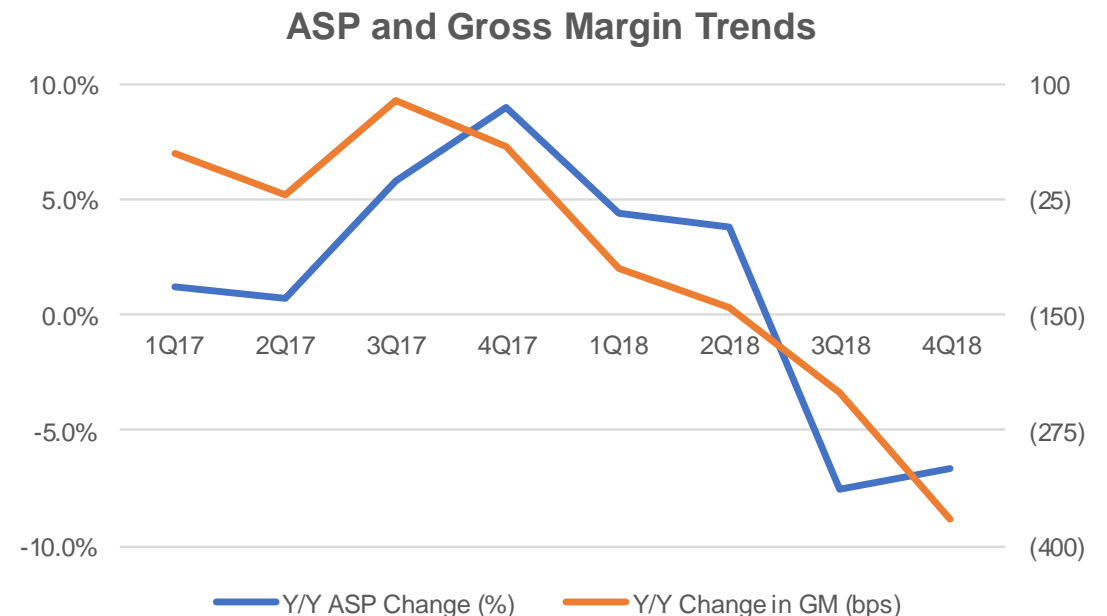
2 Street estimates don't capture the extent of pricing pressure

ALGN faces mix headwinds:

- More lower complexity / lower ASP cases
- More volume from high-loyalty providers
- Significant loyalty discount: **~15pt difference in gross margins**
 - Implies ~75bp GM headwind for every ~5% shift to loyalty sales

In addition to mix, ALGN faces pure price erosion

- ASP declined 7% in 2H18
- Every 1% decrease in ASP translates to 25bp GM compression
 - Despite these headwinds, street is modeling GMs up 90bps in 2020



3 Market is overestimating ALGN's moat

Broad industry shift towards dentists servicing low-complexity cases at lower ASPs

- There are 200,000 dentists in the US and 13,500 orthodontists (**almost 15x as many dentists as orthodontists**)
- Smile Direct Club and other DTC providers work with both orthodontists and dentists

Proliferation of DTC providers in last two years



3 Market is overestimating ALGN's moat

- Align treatment costs \$3,500 – 8,000 vs. \$1,850 for Smile Direct Club and \$1,900 for Candid Co
- DTC brands have used targeted marketing (Instagram ads, searchwords, etc) to increase awareness– this is changing the narrative around aligners and rebasing consumer price expectations



Overview

Investment Thesis

Investment Support

Catalysts / Risks

Valuation

Catalysts / Risks

Catalysts

- **Near-term:** 1Q19 EPS on Wednesday, April 24th
- **Longer-term:** New clear aligner releases / promotional pricing from competitors

Risks and Mitigants

- **Risk:** the clear aligner market overall is growing rapidly, so as one of the largest players in the space, ALGN will continue to benefit from industry tailwinds
 - **Mitigants:** ALGN's multiple already reflects the expectation for this growth (trading at 59X LTM P/E). Risk is to the downside on both volume and pricing given the cadence of new entrants
- **Risk:** transition away from traditional orthodontics model is slow than expected due to customer stickiness from both orthodontists and patients
 - **Mitigants:** Invisalign coverage is usually limited to \$500 – 1500 (8 – 26% of avg. treatment cost). As cheaper options proliferate (Smile Direct Club is \$1500), would expect consumers to switch to more fully covered treatments

Risk / Reward

Price Target

Target Price

25x FY20 EPS (AZ) \$ 140
FCF Yield (AZ) 3.5%
Delta to Current Px -51%

Risk Price

50x FY20 Street EPS \$ 350
FCF Yield (Street) 2.0%
Delta to Current Px 22%

Risk / Reward	2.4x
----------------------	-------------

Target Price Composition



Appendix – Summary financials

Financial Projections

(\$ in mm)

	Actuals			Quarterly Projections				Projections		
	FY16A	FY17A	FY18A	1Q19E	2Q19E	3Q19E	4Q19E	FY19E	FY20E	FY21E
Income Statement										
Americas	571.6	754.0	903.3	233.9	256.8	272.9	275.8	1,039.5	1,185.0	1,322.5
International	323.7	473.5	684.2	194.7	214.8	218.5	247.8	875.8	1,115.8	1,378.0
Non-Case	63.0	81.7	104.0	29.1	32.8	34.1	35.5	131.5	164.3	205.4
Total Clear Aligner Revenues	958.3	1,309.3	1,691.5	457.7	504.5	525.6	559.1	2,046.8	2,465.2	2,905.9
Scanner & Services Revenues	121.5	164.2	275.0	69.4	77.0	105.6	119.3	371.3	445.5	490.1
Total Revenue	1,079.9	1,473.4	1,966.5	527.1	581.4	631.2	678.4	2,418.1	2,910.7	3,396.0
Y/Y Growth	27.7%	36.4%	33.5%	20.6%	18.6%	24.9%	27.0%	23.0%	20.4%	16.7%
Gross Profit	815.3	1,116.9	1,447.9	373.4	412.4	447.7	473.9	1,707.5	2,018.5	2,315.1
Gross Margin	75.5%	75.8%	73.6%	70.8%	70.9%	70.9%	69.9%	70.6%	69.3%	68.2%
Y/Y Change in GM (bps)	(21)	31	(218)	(409)	(364)	(264)	(188)	(301)	(126)	(118)
EBIT	248.9	353.6	466.6	77.4	117.9	144.3	150.6	490.1	615.2	691.4
EBIT Margin	23.1%	24.0%	23.7%	14.7%	20.3%	22.9%	22.2%	20.3%	21.1%	20.4%
EPS	\$2.33	\$2.83	\$4.92	\$0.79	\$1.09	\$1.33	\$1.39	\$4.60	\$5.68	\$6.41
Y/Y Growth	32.0%	21.4%	73.7%	-32.3%	-16.6%	7.4%	15.1%	-6.6%	23.5%	13.0%
Cash Flow										
Net Income,		231.4	400.2	64.1	87.3	107.1	111.9	370.3	462.6	530.4
(+) Depreciation		37.7	54.7	19.5	19.0	19.0	19.0	76.5	92.2	107.6
(+) SBC		58.9	70.8	19.0	19.4	22.1	21.7	82.2	90.4	99.4
(-) Increase in WC		110.5	29.0	(45.8)	4.2	(37.9)	108.5	29.0	29.0	29.0
CFO		438.5	554.7	56.8	129.8	110.2	261.0	557.9	674.1	766.4
(-) Capex		(195.7)	(223.3)	(62.5)	(66.4)	(61.8)	(62.4)	(253.1)	(278.4)	(306.2)
FCF	177.1	242.8	331.4	(5.7)	63.5	48.4	198.6	304.8	395.7	460.1
FCF Yield								1.3%	1.7%	2.0%

Overview

Investment Thesis

Thesis Support

Catalysts / Risks

Valuation

Appendix – Comparable Company Analysis

Company	Ticker	Price	Market Cap (mm)	Net Debt	EV	P/E		EV / EBITDA		PEG		Sales Growth		EBITDA Margin	
						FY19	FY20	FY19	FY20	FY19	FY20	FY19	FY20	FY19	FY20
ALIGN TECHNOLOGY INC	ALGN US Equity	\$287.96	23,033.7	(744.5)	22,289.3	56.0x	41.3x	35.5x	27.0x	1.8x	1.8x	23.2%	19.4%	25.9%	27.6%
Dental Distributors															
HENRY SCHEIN INC	HSIC US Equity	\$61.36	9,290.1	1,884.1	12,066.8	17.8x	16.5x	13.7x	13.1x	3.9x	3.5x	4.2%	4.2%	8.9%	8.9%
DENTSPLY SIRONA INC	XRAY US Equity	\$50.26	11,218.9	1,347.7	12,578.5	21.8x	19.1x	14.7x	13.6x	5.9x	5.4x	3.3%	3.1%	21.2%	22.3%
PATTERSON COS INC	PDCO US Equity	\$22.18	2,110.8	951.6	3,062.5	15.5x	14.3x	12.0x	11.0x	5.3x	4.7x	2.7%	2.8%	4.6%	4.8%
Average						18.4x	16.6x	13.5x	12.6x	5.0x	4.5x	3.4%	3.4%	11.6%	12.0%
<i>Premium / (Discount) to Avg.</i>						<i>204.8%</i>	<i>147.9%</i>	<i>163.9%</i>	<i>114.8%</i>						
Diversified Manufacturers															
3M CO	MMM US Equity	\$215.03	123,835.1	11,389.0	135,276.1	20.4x	18.9x	14.0x	13.3x	6.2x	7.0x	3.0%	2.6%	29.1%	29.7%
DANAHER CORP	DHR US Equity	\$130.47	93,376.5	8,952.5	102,341.3	27.3x	24.1x	20.5x	17.6x	2.2x	3.7x	11.2%	5.9%	24.4%	25.5%
Average						23.8x	21.5x	17.3x	15.5x	4.2x	5.3x	7.1%	4.2%	26.8%	27.6%
<i>Premium / (Discount) to Avg.</i>						<i>134.8%</i>	<i>92.0%</i>	<i>106.0%</i>	<i>74.5%</i>						
Medical Technology															
INTUITIVE SURGICAL INC	ISRG US Equity	\$570.28	65,788.3	(3,063.1)	62,733.9	46.7x	40.9x	37.7x	33.0x	2.8x	2.5x	14.9%	14.3%	38.6%	38.4%
HOLOGIC INC	HOLX US Equity	\$47.31	12,656.2	2,660.2	15,316.4	19.6x	18.0x	14.1x	13.2x	4.9x	4.5x	3.7%	3.7%	32.8%	33.5%
ABIOMED INC	ABMD US Equity	\$282.87	12,753.4	(399.8)	12,353.7	76.6x	57.2x	48.6x	38.1x	2.1x	1.7x	26.6%	26.6%	32.5%	32.8%
ZIMMER BIOMET HOLDINGS INC	ZBH US Equity	\$126.56	25,891.6	8,395.9	34,292.3	16.2x	15.2x	12.7x	11.8x	6.3x	5.3x	2.4%	2.7%	33.9%	35.6%
Average						39.8x	32.8x	28.3x	24.0x	4.0x	3.5x	11.9%	11.8%	34.4%	35.1%
<i>Premium / (Discount) to Avg.</i>						<i>40.7%</i>	<i>25.7%</i>	<i>25.6%</i>	<i>12.4%</i>						

Overview

Investment Thesis

Thesis Support

Catalysts / Risks

Valuation

