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**New Rec: Align Technology, Inc. (ALGN: \$17.91) July 25, 2004**

**Position: Sell      Target: \$10      Timing: 2 (1=aggressive; 5=cautious)**

\$000	Q3 04e	Q4 04e	Q1 05e	Q2 05e	2004e	2005e	2006e
<b>Revs</b>	<b>47,564</b>	<b>50,839</b>	<b>53,584</b>	<b>56,470</b>	<b>181,812</b>	<b>232,560</b>	<b>260,721</b>
<b>EPS\$</b>	<b>0.07</b>	<b>0.10</b>	<b>0.08</b>	<b>0.09</b>	<b>0.30</b>	<b>0.40</b>	<b>0.51</b>
<b>Y/Y Gr</b>	<b>250%</b>	<b>78%</b>	<b>93%</b>	<b>9%</b>	<b>n/a</b>	<b>36%</b>	<b>28%</b>
<b>PE</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>52.7</b>	<b>44.8</b>	<b>35.1</b>
<b>PSR</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>6.4</b>	<b>5.0</b>	<b>4.4</b>
<b>Consens</b>	<b>0.09</b>	<b>0.12</b>	<b>0.11</b>	<b>0.13</b>	<b>0.34</b>	<b>0.56</b>	<b>0.74</b>

**Shares Out: 64.5M**

**Market Cap: \$1.2B**

**FYE: Dec**

Summary: Align Technology, Inc. (ALGN) designs, manufactures and markets the Invisalign system to correct malocclusion, or misalignment of teeth. The Invisalign system employs clear plastic "aligners", which are considered more aesthetically

pleasing than alternatives such as metal braces. Two Stanford MBA graduates (neither with any background in dentistry) founded ALGN in 1997, with the idea that they could apply product design and manufacturing techniques used in other industries to make the aligners. The company received initial funding from the VC firm Kleiner Perkins, and is headquartered in Silicon Valley.

ALGN started offering its treatment solution in July 1999, and initially sold only to orthodontists (ODs). The company has trained about 7,700 ODs in the US out of an estimated 9,700 licensed ODs. As a result of an antitrust lawsuit filed in 2001 on behalf of licensed general practitioners (GPs), the company trained 5,000 GPs in 2002, and committed to train about 5,000 GPs each year from 2003 to 2005.

Invisalign is appropriate treatment for mild and moderate malocclusions in cases where the second molars have erupted and jaw development is substantially complete. Therefore, the target market for Invisalign is older teens and adults. ODs indicated to us that only about 10% of their patients were candidates for Invisalign. Treatment at an OD costs a patient \$4,500 per arch, while treatment at a GP costs \$3,000 per arch. Braces cost \$2,500 per arch. We estimate that the company's average sales price (ASP) per case (or the cost to a dental professional) is \$1665, with an OD case ASP of \$1850, and a GP case ASP of \$1440. Most insurance will not pay for Invisalign, since it is regarded as a cosmetic treatment.

Since the beginning of 2003, ALGN shares have been on a tear, rising from \$2.76 at the end of 2002 to \$17.91 today. This share price rise has been driven by revenue and earnings growth, which, in turn, has been due to increased adoption of the Invisalign system by consumers. The company has also been fortunate in that an antitrust lawsuit loss resulted in a rapidly growing channel (namely, GPs) for its product.

In its latest quarter, ALGN beat "street" revenue and EPS estimates by \$1.2M (3%) and 3 cents (50%), respectively. The company also said on the call that top line growth of 30%-50% would be possible beyond 2005 as a result of a higher number of trained GPs, higher utilization (cases per professional) and international expansion. Such statements have emboldened ALGN bulls, who now propose that the company's shares are worth \$25 based on a 40X multiple of 2005-2006 earnings. The shares trade today at 32X the 2005 "street" EPS estimate.

We think the current expectations for growth are unrealistic for a number of reasons. First, in our opinion, the GP channel, which is expected to drive revenue growth, should not grow as rapidly as the bulls anticipate. There is already evidence of the difficulty in growing this channel. As we discuss in more detail

later, case shipped per GP, ASP per GP case, and the fraction of the trained GP base submitting case orders have been constant or increasing only slightly in the past several quarters. While bulls expect these metrics to improve, that does not appear likely from our conversations with GPs. We think the number of GPs trained will be the primary determinant of the growth rate. The company's record in this respect has been problematic.

While the company had originally committed to training 5,000 GPs a year and did so in 2002, it trained only 4,400 GPs in 2003 and is on a run rate to train just 4,000 in 2004. We note that the company trained only 700 GPs in Q1 04, but the number jumped to 1,300 in Q2 04. According to a source, this spike is probably due to both case price discounts offered to GPs as well as a rush to beat a price increase effective July 1, 2004. Moreover, while there are 130,000 licensed GPs in the US according to the company, the price of the treatment suggests that most of the target GPs would be in the major metros. The fact that ALGN has already not been meeting its training goal appears to indicate that the actual number of GPs trained and the cases done by GPs will be less than expected.

Second, the US OD channel, which accounted for half of revenues in Q2 04, has already slowed significantly, with OD revenues growing at an annualized 20% rate, well below Align's long-term growth goal. Based on our conversations with ODs, we think growth in this channel will continue to decline.

Third, the company stated that it is setting up a joint venture in Japan. While the bulls think that international revenue could grow 40% in the next few years, we note that the company's current international operations in Canada, Europe and Australia are growing at 28% today. Moreover, the Japanese have more severe misalignments than Americans, and thus the proportion of OD patients who could be candidates for Invisalign treatment would be much smaller.

Conversations with numerous ODs, GPs, and dental practice office managers suggests to us that while newly trained GPs may be seeing growth in the number of Invisalign patients in their offices, this is off small base, and the number of patients seeking treatment at more experienced practices is not growing. These findings are consistent with our analyses of the data reported by ALGN, as we pointed out earlier.

Our survey of dental practices also indicates bulls and the company overlook the issues that practitioners using Invisalign have faced. This is not very surprising since the treatment is so new and there is little long term experience with results. For instance, an OD pointed out to us that because Invisalign aligners move the teeth and not the crown, the teeth of patients who do not wear their retainers

faithfully after the end of the treatment will return to the original state. In his experience, Invisalign patients are less disciplined about wearing the retainers. Moreover, he did not think that long-term studies of efficacy would be favorable to Invisalign. This could be an important factor for the company since most patients have been treated with Invisalign only in the last 3-4 years. Unfavorable efficacy results would also be detrimental to ALGN's efforts to convince dentists to use Invisalign for more severe misalignments, a growth strategy that the company hopes to pursue.

Some dentists noted that a fraction of the patients are dissatisfied. ODs can mollify their patients by paying for most, or a portion of alternative treatments such as braces, and most do. However, this could become an issue for GPs, since they are not trained to offer the alternative procedures and they risk alienating patients who come to them regularly for more ordinary procedures if the Invisalign treatment does not turn out well. Some GPs indicated that they would shy away from the all but the simplest cases because of this risk.

Our analysis of the numbers and our field research therefore suggest that the company is unlikely to grow at the rates forecast by the bulls. While the "street" projects revenues of \$265M and \$322M (and top line growth of 44% and 22%) in 2005 and 2006, our corresponding estimates are \$233M and \$261M (with growth rates of 28% and 12%), respectively. Our EPS estimates for 2004, 2005 and 2006 are 30 cents, 40 cents, and 51 cents, respectively, compared to "street" estimates of 34 cents, 56 cents, and 74 cents respectively. Since we project EPS to grow 28% from 40 cents in 2005 to 51 cents in 2006, we think 25% is an appropriate mid-term growth rate for ALGN. Accordingly, we apply a 25X multiple to our 2005 EPS estimate to arrive at a price target of \$10.

As we discuss later, large institutional holders as well as insiders have been selling heavily since February when the price reached \$20. Some of the insiders, including the CEO, had earlier been buyers up to \$10. We think their actions are telling with regard to the shares' value.

#### Background:

Align Technology, Inc. (ALGN) designs, manufactures and markets Invisalign, a system for treating malocclusion, or misalignment of teeth, using clear plastic "aligners". Two Stanford University MBA students, neither with any expertise in dentistry, founded the company in 1997 with a business plan that outlined a strategy to produce the aligners based on other industries' use of sophisticated product design and manufacturing techniques. ALGN is headquartered in Santa Clara, California, and sells Invisalign systems in the US,

Canada, Europe, and Australia. International revenues constitute about 10% of the company's total revenues.

The chief advantages of Invisalign to a patient are twofold. First, because the aligners are clear, they are more aesthetically pleasing than metal braces. Second, unlike braces, aligners can be taken off for eating, brushing and flossing, which could result in improved oral hygiene.

However, there are limitations to the Invisalign system. First, the treatment is not appropriate if the potential patient does not have fully erupted second molars or substantially complete jaw growth. As a result, Invisalign patients are in their late teens or older. Second, Invisalign is a sole appropriate treatment only for mild malocclusions. For moderate malocclusions, it can be used in conjunction with braces. The system does not work for severe misalignments.

The orthodontists (ODs) with whom we spoke indicated that only between 5% and 20% of their patients are candidates for Invisalign (with a median figure of 10%).

There are several steps involved in Invisalign treatment. First, a patient consults with a dental professional, who determines whether Invisalign is an appropriate treatment for the patient's condition. If it is and the patient is willing to pay, the OD or the general practitioner (GP) takes an impression of the patient's dental arches, X-rays of the patient's dentition, a bite impression, and a treatment plan, all of which are sent to ALGN's Santa Clara facility. Next, the company constructs a three-dimensional computer model that is sent to the company's Costa Rica facility. There, a customized three-dimensional treatment plan is prepared that simulates the appropriate tooth movement in two week increments. The dental professional then uses an interactive Internet application called ClinCheck to review the treatment plan, either approving or asking for adjustments. Finally, a contract manufacturer in Juarez, Mexico, fabricates the aligners and ships them to the dentist.

The typical treatment period is 12 months. Upon completion of treatment, the patient is required to wear a retainer forever. This retainer can either be the Invisalign Aligners or a conventional retainer.

In February 2001, a lawsuit was filed on behalf of all licensed GPs at the time alleging that ALGN's then practice of providing Invisalign only to ODs was in violation of antitrust laws. In November 2001, the company settled and promised to train 5,000 GPs each year from 2002 to 2005. In the latest quarter,

51% of the company's revenues were from US ODs while 34% were from US GPs.

The Invisalign system is more expensive to patients than braces. A typical patient pays \$3,000 per arch if the dentist is a GP, and \$4,500 per arch if the dentist is an OD. A comparable cost figure for braces is \$2,500. Dental insurance rarely covers treatment for misalignment undertaken after age 18 since the treatment is considered to be cosmetic.

Ormco Orthodontics, a subsidiary of Sybron Dental Specialties, manufactures a competing product called Red, White & Blue (RWB). RWB costs only \$600/set, with a 50% discount on the price of the next set. Moreover, the treatment period is only 6 to 12 weeks. However, RWB uses only three aligners, compared to 30 aligners in Invisalign, and can be used only to treat mild malocclusion. In our surveys of dental practices, we did not encounter many instances where RWB was preferred over Invisalign.

Discussion:

1. ALGN shares are up 8.5% year to date (compared to a 3.2% decline in the Russell 2000 index) and were up almost 500% in 2003. The shares trade at 32X the "street's" 2005 EPS estimate. The bulls argue that strong growth resulting from increasing Invisalign utilization and expanded customer base will drive sustained rapid growth over the next few years. One of the "street" analysts has a target price of \$25 on the stock based on 40X 2006 EPS estimates. The company itself has contributed to the bulls' enthusiasm by asserting in the latest conference call that it can achieve top line growth of 30%-50% beyond 2005.

While we do not disagree that ALGN revenues will grow, our analyses of both the company's financial data as well as responses from ODs and GPs with whom we have spoken suggests that the bulls' expectations may be too high. As we detail below, growth at ODs is slowing and GP utilization has not changed significantly in recent quarters. The company benefited from its fortuitous loss in the antitrust case by securing a new provider channel. However, we think most of the "greenfield" opportunities are getting exhausted, and that ALGN will be hard pressed to meet its top line growth expectations even beyond 2004. Consequently, we think that the richly priced shares are likely to fall.

2. US OD revenue growth has slowed significantly in recent quarters. OD revenue accounted for half of the company's total revenue in Q2 04. The annualized 20% Y/Y revenue growth using recent quarter data is already below the company's aggressive future top line growth projections.

ALGN started by targeting ODs. The company, by its own admission, has already trained 7,700 of 9,700 (or about four-fifths of) domestic orthodontists. In Table 1, we show that both the number of submitting ODs as well as cases shipped to US ODs is exhibiting sequential growth only in the mid single digits. For instance, the number of ODs submitting cases in Q2 was up just 8% Y/Y, even though only a third of the trained ODs are submitting orders.

Table 1: Shipment data for US ODs

	Q1 03	Q2 03	Q3 03	Q4 03	Q1 04	Q2 04
Submitting US ODs	2,500	2,600	2,600	2,650	2,700	2,800
Q/Q change		4%	0%	2%	2%	4%
US OD revenue (\$000)	14,783	17,253	19,583	20,456	21,526	22,626
Q/Q change		17%	14%	4%	5%	5%
Cases/US OD (average)	4.23	4.40	4.35	4.40	4.48	4.61
US OD cases	10,575	11,440	11,310	11,660	12,096	12,908
Q/Q change		8%	-1%	3%	4%	7%
US OD case ASP (\$)	1,398	1,508	1,731	1,754	1,780	1,753

Sources: Company reports, OWS estimates

We note that although annualized revenue growth for US ODs using recent quarterly data appears to be 20%, the “street” is assuming 31% growth in 2004 and 18% in 2005.

3. Bulls assume that growth in the number of trained GPs and increasing utilization in that channel will drive future growth. While revenue growth in this channel has been rapid, the utilization measures appear to be already slowing.

Table 2 shows metrics for the GP channel. While GP revenues, which account for a third of total revenues, are rising at an annualized 100% clip, the two critical utilization data points are not growing, contrary to the bulls’ contention. The cases shipped per GP has been constant in the past few quarters in the 2.2-2.3 range, while the ratio of submitting GPs to the trained GPs base at the end of the previous quarter has been in the low 40% range.

Table 2: Shipment data for US GPs

	Q1 03	Q2 03	Q3 03	Q4 03	Q1 04	Q2 04
Submitting GPs	2,200	2,600	3,000	3,500	3,950	4,450
Q/Q change		18%	15%	17%	13%	13%
US GP revenue (\$000)	4,617	6,805	9,417	10,667	12,599	15,020
Q/Q change		47%	38%	13%	18%	19%
GP case ASP (\$)	1,076	1,240	1,395	1,367	1,430	1,442
GP cases shipped	4,290	5,486	6,750	7,805	8,809	10,413
Q/Q change		28%	23%	16%	13%	18%
Cases per GP (average)	1.95	2.11	2.25	2.23	2.23	2.34
GPs trained and certified	800	1,300	1,050	1,200	700	1,300
Trained GP base EOQ	6,200	7,500	8,550	9,750	10,450	11,750
Submitting GP/trained GP at end of previous quarter	40.7%	41.9%	40.0%	40.9%	40.5%	42.6%

Source: Company reports

As a result, we think that the company is dependent on an increasing trained GP base to grow this channel. However, the GP training has been proceeding slower than the ALGN's stated goal. In its 2002 10-K, the company said that it has trained about 5,000 GPs that year, and planned to train 5,000 in each of the following three years. Yet, in 2003, the company trained only 4,400 GPs, and has trained 2,000 GPs in the first half of 2004. Clearly, the shortfall is not because of training resources since the company has demonstrated the ability to train 5,000 GPs (in 2002).

ALGN management claims that its opportunity in this channel is large since there are 130K licensed GPs in the US. However, the slow rate of GP training (and we are only in the third year of GP training) suggests that the actual universe of GPs that might use Invisalign may be far smaller.

The "street" projects 104% growth in this channel in 2004 and 80% in 2005. Our estimate for 2004 GP revenue growth rate is also 104%. However, increasing this rate becomes harder as the revenue base grows larger. Therefore, we think that "street" expectations for 2005 may be too high. We project 60% Y/Y growth in GP revenue in 2005.

4. Our field research also supports the view that growth may not be as robust as the bulls hope. Additionally, our surveys also highlighted certain problems with the Invisalign system that neither the company nor the bulls have acknowledged.

We spoke with over 50 ODs, GPs and dental office managers at practices across the country where Invisalign is offered as a treatment option. The surveyed practices included those that had been offering Invisalign for several years as well as those where GPs were recently trained. (Remember, most of the ODs were trained at least three years ago.)

The results of our conversations indicated that, in general, the number of Invisalign patients at the older practices (where Invisalign had been offered for more than two years, regardless of whether ODs or GPs or both were offering the treatment) was constant over the past six months, while the number was growing at newer practices (off a small or zero base). This appears to support our contention that growth is coming mostly from the newly trained GP practitioner base, and belies the bull argument that utilization will increase across the practitioner base.

ODs as well as GPs indicated that more prospective patients could become interested if ALGN were to drop prices. The practices indicated that they did not have much price flexibility themselves to decrease the cost to patients. However, ALGN has said that it did not intend to drop prices. The company actually increased prices by about \$100 per package a year ago.

We also heard from some ODs that dissatisfaction rates were as high as 15%. If a patient is dissatisfied with the procedure or the results, ALGN disclaims any responsibility. Some ODs told us that they bear the full cost of an alternative treatment, while others said they bear a portion. Very few ODs said that they do not financially assist the patient with another type of treatment. Of course, GPs are at a disadvantage here since they are not trained (or qualified) to offer another form of treatment for tooth misalignment. This fact provides a disincentive to many GPs to offer the treatment option, since if it fails it can seriously damage the relationship that the GP has built up with his/her patient. A GP who experiences trouble with the treatment is forced to send the patient elsewhere for help.

One OD told us that Invisalign only moves the tooth angle, unlike braces, which also change the position of the crown. As a result, he thinks that the teeth have less of a chance of being retained in their new positions. Moreover, it was his experience that Invisalign patients did not wear their retainers after the end of the treatment, and consequently tended to get dissatisfied when the teeth moved back. In his opinion, long-term studies would show that the Invisalign effect was temporary in many cases.

On the Q2 conference call, ALGN suggested that its future plans call for extending the use of its aligners for more difficult cases. Based on the

aforementioned OD comments, we think the company may find that its plans are too aggressive.

## 5. Recent results

ALGN reported Q2 04 results on July 22. Revenue of \$44.2M was \$1.2M above “street” expectations, while EPS of 9 cents beat the “street” estimate by 3 cents. Higher GP and training revenues accounted for the revenue surprise, while lower sales and marketing costs drove the earnings upside.

We note that the ratio of submitting GPs to the trained GP base at the end of the previous quarter rose in Q2. However, according to sources, this was due to incentives implemented by the company earlier this year that offered newly certified GPs \$325 off their training costs if they ordered four cases with 60 days of their certification. The company announced a \$75 net increase in the training fee, effective July 1, 2004. We think that this accounted for the higher training activity in Q2, when 1,300 GPs were trained. In Q1 04, only 700 GPs were trained.

The company said that it would soon announce a joint venture in Japan. The company expects that the JV will start to generate meaningful revenues after three years. We note that malocclusions among adults in Japan tend to be more severe than those in the US. Thus, the market potential may not be as significant as bulls estimate, though an unexpected level of success in international operations would be a risk to our estimates. We do note, however, that ALGN has been offering the Invisalign system in other developed countries such as Canada, Europe, and Australia, and the international revenue growth rate is already below management expectations of long-term revenue growth (Table 3). The “street” anticipates Y/Y international revenue growth of 40% in 2004 and 37% in 2005.

Table 3: ALGN international revenues

(Revenues in \$000)	Q1 02	Q2 02	Q3 02	Q4 02	Q1 03	Q2 03	Q3 03	Q4 03	Q1 04	Q2 04
International revenues	755	1,434	1,413	1,920	2,236	3,247	2,991	3,223	3,536	4,150
Q/Q change		90%	-1%	36%	16%	45%	-8%	8%	10%	17%
Y/Y change					196%	126%	112%	68%	58%	28%

Source: Company reports

At June 30, 2004, ALGN had \$56.4M in cash and \$2.7M in debt, for a net cash position of \$53.6M, or \$0.83 per share. The cash balance grew \$8.7M in the first six months of 2004. DSOs rose sequentially from 53 days to 55 days. Shareholder equity at the end of Q2 was \$76.2M or \$1.18 per share. Intangible assets on the balance sheet are negligible.

## 6. Financial assumptions.

a. Revenue

i. OD revenue.

Since ALGN does not break out the number of ODs that submit cases every quarter by geography, we constructed our revenue model for ODs in the same manner. Table 4 shows the various metrics related to worldwide OD revenue in the past seven quarters. Since the international revenues result wholly from ODs, we add international revenues to US OD revenue to compute the overall OD revenue.

Table 4: OD revenue metrics

	Q4 02	Q1 03	Q2 03	Q3 03	Q4 03	Q1 04	Q2 04
Submitting ODs	3,200	3,300	3,450	3,500	3,700	3,800	3,900
Q/Q change		3.1%	4.5%	1.4%	5.7%	2.7%	2.6%
US OD revenue (\$000)	13,802	14,783	17,253	19,583	20,456	21,526	22,626
International revenue (\$000)	1,920	2,236	3,247	2,991	3,223	3,536	4,150
Total OD revenue (\$000)	15,722	17,019	20,500	22,574	23,679	25,062	26,776
Estimated OD ASP (\$)	1,600	1,600	1,700	1,750	1,850	1,850	1,850
OD cases shipped	9,826	10,637	12,059	12,899	13,155	13,547	14,474
OD case sequential growth		8.2%	13.4%	7.0%	2.0%	3.0%	6.8%
Cases per OD (average)	3.07	3.22	3.50	3.69	3.56	3.57	3.71

Source: Company reports, OWS estimates

As Table 4 shows, the cases per OD has ranged from 3.5 to 3.7 in the past five quarters, while the number of ODs submitting cases is growing sequentially in 2.5%-3% range. As noted above, our conversations with ODs appears to bear this slowing trend out. Going forward, we assume that the sequential growth range in submitting ODs will decrease gradually to 2% by the end of 2006, and that cases per OD will peak at 3.8 in 2005 and decline thereafter to 3.5 by 2006. We also assume that OD case ASP will be stable at \$1850.

ii. GP revenue.

Here we assume that the company will train 4,700 GPs in 2004, and 4,500 GPs each in 2005 and 2006. Note that these assumptions are higher than the 4,400 GPs trained in 2003 and the annual run rate implied by GPs trained so far in 2004 (4,000). Our forecast for the ratio of submitting GPs to the trained base at the end of the previous quarter is 41% for the remainder of 2004 and 2005, and 40% for 2006. We think that as the trained base grows and GPs from more marginal areas

(as opposed to wealthy metros) are trained, the ratio will decline. We assume that cases per GP will gradually rise from 2.3 in Q2 04 to 2.6 by 2006. As Table 2 indicates, GP case ASPs have been rising gradually as a result of ALGN's efforts to convince the GPs to treat more difficult cases. We estimate that the case ASP for GPs will rise to \$1550 by 2006.

iii. Training revenue.

ALGN obtains revenue from training new GPs and providing advanced certification and continuing education classes to previous trained professionals. We think that training revenue per GP trained is an appropriate metric to use to model future revenue, since this is the primary driver of training revenues. This figure has averaged about \$1,950 in the past four quarters. We assume that this number will be similar going forward, and our training revenue forecasts are driven by the GP training estimates cited in the previous section.

iv. Gross margin.

Table 5 shows the gross margin trend for ALGN. The company has provided gross margin guidance of 69%-70% for Q3 04, and 69%-72% for 2005. Our assumptions are consistent with guidance at 69% for Q3 04, 71% for 2005, and 72% for 2006.

Table 5: ALGN gross margins

	Q1 02	Q2 02	Q3 02	Q4 02	Q1 03	Q2 03	Q3 03	Q4 03	Q1 04	Q2 04
Gross margin	30.4%	37.2%	46.8%	47.5%	51.2%	56.9%	62.3%	66.1%	66.9%	68.5%

Source: Company reports

v. Operating expenses.

Table 6 shows the operating expense trend for the company. The company's guidance calls for operating expenses to total \$27.6M-\$28.6M in Q3 04, and \$103M-\$105M for all of 2004. In 2005, the company expects operating margin of 17%-22%.

Table 6: ALGN operating expenses as % of sales

	Q1 02	Q2 02	Q3 02	Q4 02	Q1 03	Q2 03	Q3 03	Q4 03	Q1 04	Q2 04
S&M % of sales	60.0%	72.0%	58.8%	48.7%	43.6%	37.0%	29.3%	29.3%	33.1%	29.8%
G&A % of sales	44.1%	40.9%	37.8%	25.1%	22.7%	24.4%	20.9%	19.8%	18.2%	17.4%
R&D % of sales	15.3%	15.8%	13.6%	12.0%	9.8%	8.7%	7.3%	7.4%	7.6%	7.4%

Source: Company reports

The company intends to spend more on direct to sales and field support infrastructure, marketing (including direct-to-consumer marketing), customer education programs, R&D and international projects in the third and coming quarters. We think that higher marketing expenditures will be necessary if, as we expect, shipped case volume slows.

Additionally, the company expects to incur a charge of \$1.2M related to the departure of an executive, which management estimates would reduce EPS by 2 cents in Q3 04.

Our operating expense assumptions are \$27.7M and \$103M for Q3 04 and 2004, respectively, and our operating margin forecast for 2005 is 17.6%. All of these figures are consistent with the company's guidance.

vi. Other expenses.

We think that the company's net interest expense will decrease gradually as the company generates cash, and forecast net interest income by 2006. We use the company's tax rate guidance and assume tax rates of 10% in 2004, and 35% in 2005. We estimate a tax rate of 35% in 2006.

7. Valuation and Risks.

Our revenue and EPS projections, based on the above assumptions, are shown in Table 7. The table also shows the "street" estimates as well as company guidance for 2004 and 2005. Note that the "street" estimates are quite aggressive compared to management guidance, which could spark a decline in the share price if ALGN cannot meet the bullish projections. We also note that the 2004 revenue estimate includes \$5M from a "case refinement" accounting adjustment undertaken by the company a year ago. This benefit will not recur in 2005 and future years.

Table 7: 2004-2006 revenue and EPS estimates for ALGN

	OWS estimates	"Street" estimates	Management guidance
2004 revenue	\$181.8M	\$184.9M	\$180M-\$183M
2004 EPS	\$0.30	\$0.34	\$0.27-\$0.31
2005 revenue	\$232.6M	\$264.7M	\$240M-\$260M
2005 EPS	\$0.40	\$0.56	\$0.36-\$0.55
2006 revenue	\$260.7M	\$322.2M	N/a
2006 EPS	\$0.51	\$0.74	N/a

Sources: OWS estimates, company reports, "street" reports

We estimate EPS will grow 28% from \$0.40 in 2005 to \$0.51 in 2006. Therefore, we think 25% is an appropriate mid-term EPS growth rate assumption

for the company. If we apply a 25X multiple to our 2005 EPS estimate, we arrive at a share valuation of \$10.

From a cash flow standpoint, management suggested that 2004 depreciation and amortization expense will be \$10M-\$11M, while capital expenditures are expected to total \$11M-\$13M. Our estimate for 2005 net income is \$26M, and if we assume that the relationship between D&A expense and capex will be the same in 2005 as in 2004, our free cash flow estimate is \$25M. At today's price, ALGN shares are trading at 46X this estimated 2005 free cash figure.

There are two primary risks to our story. First, as stated before, the company may be successful in training more GPs than we anticipate, and it might drive higher utilization of those GPs through price reductions. However, this would impact gross margins and the company's bottom line. The other risk is that ALGN's international growth could be stronger than our forecast, as we stated earlier. We think that the data to date does not support such a scenario.

#### 8. Insider selling.

ALGN insiders and institutional holders have been selling shares at such a rapid rate since February that the CEO felt compelled to address the issue on the latest conference call. Among institutional holders, The Carlyle Group sold 1M shares, or about 28% of its stake, in late May at about \$20. The VC group Kleiner Perkins sold 1.4M shares (27% of its stake) at about \$21. The CEO has exercised and sold options representing more than 350,000 shares (or more than 80% of his total options) at prices of \$18 or above. Other senior executives and directors have also been selling.

We note that the CEO and other insiders were buying shares at prices up to \$10 in late 2002 and early to mid-2003.

#### 9. Financial projections.

a. Quarterly Projections.

	Q1 04	Q2 04	Q3 04E	Q4 04E	Q1 05E	Q2 05E	Q3 05E	Q4 05E
Ancillary Products	1,544	2,408	2,731	2,537	1,990	2,323	2,153	2,351
Invisalign	37,661	41,796	44,833	48,303	51,594	54,146	57,719	60,284
Total Revenue	39,205	44,204	47,564	50,839	53,584	56,470	59,872	62,634
Cost Of Revenues	12,995	13,931	14,745	15,506	16,075	16,659	17,363	17,851
S&M	12,978	13,172	15,102	15,887	16,611	17,364	18,261	18,947
G&A	7,122	7,712	9,180	8,516	8,841	9,176	9,580	9,865
R&D	2,976	3,266	3,425	3,559	3,644	3,727	3,832	3,883
Total Opex	36,071	38,081	42,451	43,468	45,171	46,926	49,035	50,546
Operating Inc	3,134	6,123	5,113	7,372	8,413	9,543	10,837	12,088
Other	(227)	(175)	(150)	(125)	(100)	(75)	(50)	(25)
Pretax Income	2,907	5,948	4,963	7,247	8,313	9,468	10,787	12,063
Income Taxes	133	394	496	942	2,909	3,314	3,775	4,222
Net Income	2,774	5,554	4,467	6,305	5,403	6,154	7,011	7,841
Diluted Shares	64,559	64,461	64,750	65,000	65,250	65,500	65,750	66,000
Diluted EPS	0.04	0.09	0.07	0.10	0.08	0.09	0.11	0.12

Y/Y change

	Q1 04	Q2 04	Q3 04E	Q4 04E	Q1 05E	Q2 05E	Q3 05E	Q4 05E
Ancillary Products	17%	25%	33%	18%	29%	-4%	-21%	-7%
Invisalign	74%	53%	40%	41%	37%	30%	29%	25%
Total Revenue	71%	51%	40%	39%	37%	28%	26%	23%
Cost Of Revenues	16%	11%	15%	25%	24%	20%	18%	15%
S&M	30%	22%	51%	49%	28%	32%	21%	19%
G&A	37%	8%	29%	18%	24%	19%	4%	16%
R&D	32%	28%	39%	32%	22%	14%	12%	9%
Total Opex	26%	15%	31%	32%	25%	23%	16%	16%
Operating Inc	-155%	-260%	212%	111%	168%	56%	112%	64%
Other	15%	-141%	-58%	n/a	-56%	-57%	-67%	-80%
Pretax Income	n/a	n/a	288%	106%	186%	59%	117%	66%
Income Taxes	13200%	n/a	1241%	1948%	2088%	741%	661%	348%
Net Income	n/a	n/a	260%	81%	95%	11%	57%	24%
Diluted Shares	13%	12%	3%	2%	1%	2%	2%	2%
Diluted EPS	n/a	n/a	250%	78%	93%	9%	55%	22%

As % of sales

	Q1 04	Q2 04	Q3 04E	Q4 04E	Q1 05E	Q2 05E	Q3 05E	Q4 05E
Ancillary Products	4%	5%	6%	5%	4%	4%	4%	4%
Invisalign	96%	95%	94%	95%	96%	96%	96%	96%
Total Revenue	100%	100%	100%	100%	100%	100%	100%	100%
Cost Of Revenues	33%	32%	31%	31%	30%	30%	29%	29%
S&M	33%	30%	32%	31%	31%	31%	31%	30%
G&A	18%	17%	19%	17%	17%	16%	16%	16%
R&D	8%	7%	7%	7%	7%	7%	6%	6%
Total Opex	92%	86%	89%	86%	84%	83%	82%	81%
Operating Inc	8%	14%	11%	15%	16%	17%	18%	19%
Other	-1%	0%	0%	0%	0%	0%	0%	0%
Pretax Income	7%	13%	10%	14%	16%	17%	18%	19%
Income Taxes	0%	1%	1%	2%	5%	6%	6%	7%
Net Income	7%	13%	9%	12%	10%	11%	12%	13%

b. Annual Projections.

	2004E	2005E	2006E
Ancillary Products	9,220	8,817	8,807
Invisalign	172,592	223,743	251,914
Total Revenue	181,812	232,560	260,721
Cost Of Revenues	57,177	67,947	74,305
S&M	57,139	71,183	78,639
G&A	32,529	37,462	40,016
R&D	13,225	15,086	15,707
Total Opex	160,071	191,679	208,667
Operating Inc	21,742	40,881	52,054
Other	(677)	(250)	90
Pretax Income	21,065	40,631	52,144
Income Taxes	1,965	14,221	18,250
Net Income	19,099	26,410	33,894
Diluted Shares	64,693	65,625	65,875
Diluted EPS	0.30	0.40	0.51

Y/Y change	2004E	2005E	2006E
Ancillary Products	24%	-4%	0%
Invisalign	50%	30%	13%
Total Revenue	48%	28%	12%
Cost Of Revenues	17%	19%	9%
S&M	38%	25%	10%
G&A	22%	15%	7%
R&D	33%	14%	4%
Total Opex	26%	20%	9%
Operating Inc	n/a	88%	27%
Other	570%	-63%	n/a
Pretax Income	n/a	93%	28%
Income Taxes	2240%	624%	28%
Net Income	n/a	38%	28%
Diluted Shares	12%	1%	0%
Diluted EPS	n/a	36%	28%
As % of sales	2004E	2005E	2006E
Ancillary Products	5%	4%	3%
Invisalign	95%	96%	97%
Total Revenue	100%	100%	100%
Cost Of Revenues	31%	29%	29%
S&M	31%	31%	30%
G&A	18%	16%	15%
R&D	7%	6%	6%
Total Opex	88%	82%	80%
Operating Inc	12%	18%	20%
Other	0%	0%	0%
Pretax Income	12%	17%	20%
Income Taxes	1%	6%	7%
Net Income	11%	11%	13%