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<b>New Rec: Waters Corp.</b>	<b>(WAT-\$46.45)</b>	<b>April 1, 2001</b>
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**Position: Sell      Target: \$28      Timing: 2 (1=aggressive; 5=cautious)**

<b>\$000</b>	<b>Q101e</b>	<b>Q201e</b>	<b>Q301e</b>	<b>Q401e</b>	<b>2001e</b>	<b>2002e</b>
<b>Revs</b>	<b>203,250</b>	<b>222,824</b>	<b>217,156</b>	<b>255,322</b>	<b>898,548</b>	<b>1,005,417</b>
<b>EPS</b>	<b>0.26</b>	<b>0.33</b>	<b>0.31</b>	<b>0.42</b>	<b>1.32</b>	<b>1.47</b>
<b>Y/Y Gro</b>	<b>17%</b>	<b>19%</b>	<b>16%</b>	<b>18%</b>	<b>16%</b>	<b>11%</b>
<b>PE</b>					<b>35</b>	<b>32</b>
<b>PSR</b>					<b>7.1</b>	<b>6.4</b>
<b>Consen</b>	<b>0.26</b>	<b>0.33</b>	<b>0.32</b>	<b>0.44</b>	<b>1.35</b>	<b>1.63</b>

**Shares Out: 137.8 M      Mkt. Cap: \$6.4 B      FYE: Dec**

Summary: Waters sells high performance analytical instruments and consumables mainly to the pharmaceutical and bio-technology industries. WAT's main business segments are high pressure liquid chromatography (HPLC, its original business), thermal analysis (TA, acquired in 1996), and mass spectrometry (MS, acquired in 1997).

WAT grew revenue 14% year over year in 1999 and 13% in 2000. This was mainly driven by the MS segment, which grew 28% in 1999 and 27% in 2000. The

rest of WAT's business grew at 9% in 1999 and 8% in 2000.

MS revenue growth of 28% in 1999 and 27% in 2000 was mostly driven by sales of WAT's quadrupole time of flight instrument (Q-TOF), which grew 44% in 1999 and 42% in 2000. As a result, Q-TOF is the key driver not only of the good MS results, but also of WAT's overall good results.

The "street" expects WAT's revenue growth to accelerate to 14% in 2001 and to 15% in 2002. This acceleration of growth depends on an acceleration of MS sales in 2001, and in particular, sales of Q-TOF.

The trouble with the bullish argument is that the growth of Q-TOF sales has actually been slowing, and we expect it to slow further. The problem is that the market for Q-TOF instruments is limited and is nearing saturation. The units are very expensive, at about \$500,000 each. We estimate that there are about 800 potential Q-TOF sites world wide. We further estimate that there were 400 Q-TOF units in the field at the end of 2000.

In addition, WAT had no competition in Q-TOF until 1999, when ABI introduced an instrument, the Q-Star.

There are several factors that limit the Q-TOF's market size. First, its high price, at \$500,000 each. Second, the machines are very high through put, which means that sites do not need multiple units. In proteomics applications, the most important application, researchers can not prepare enough samples to justify multiple units. Finally, the time that is required to analyze the proteomics data limits the number of units needed.

Q-TOF instruments are useful in structural proteomics, that is determining the existence and structure of proteins in a sample. However, these instruments are not helpful in that area of proteomics which will attract far more attention and money, that is functional proteomics, which is studying how the protein actually functions in healthy and in diseased tissue in order to make products.

As a result, it is incorrect to correlate the sale of Q-TOF instruments with the long term growth of proteomics in general. The reality is that the explosion of the new field of proteomics created a huge demand for Q-TOF instruments. WAT had a virtual monopoly in the field until recently. The uptake of the instruments has been very rapid. There are a limited number of sites and scientists that can use the instrument, and most have it now.

Q-TOF growth is already slowing. WAT's Q-TOF sales dropped to 42% in 2000 from 44% in 1999. Strategic Directions International (SDI), the leading industry consultant agrees with our analysis that the market growth will continue to slow from the 2000 pace, as we discuss below. We estimate that the market will be pretty much saturated sometime in 2002. As the market for Q-TOF becomes saturated, we expect WAT's total sales to trend lower, eventually reaching the 9% growth of the markets in which it participates. We expect WAT sales growth to

remain at 13% in 2001, and to decline to 12% in 2002. Signs of the declining growth should be apparent in the second half of 2001, when the Q-TOF market begins to approach saturation.

WAT's current valuation should give sellers of WAT shares protection until signs that expectations cannot be met materialize. On a P/E basis, WAT shares trade at 41x trailing EPS, 36x 2001e EPS, 30x 2002e EPS, despite an EPS estimated growth rate of 18% in 2001 and 21% in 2002, Thus the PE/Growth ratio is currently 2x for 2001, and 1.5x for 2002. "Street" analysts expect an acceleration of EPS growth in 2002, which is very unlikely to occur, in our opinion.

WAT carries a valuation, based on P/E, on average about 75% higher than its peers. On a price to sales basis, WAT is valued at 100% higher than any peer.

It is also interesting to note that WAT has historically traded at a trailing P/E between 36 and 11, and a PSR between 6.3 and 1.5. If WAT shares revert to the mean of these valuations the shares could be cut in half. We have an initial target of \$28 based on 21 times EPS of \$1.32 in 2001 and about 4x 2001 revenues.

#### Background:

Water's products are analytical instruments, software and consumables used by pharmaceutical, biotechnology, manufacturing, and food science/agriculture industries. In 1999, 67% of revenues came from sales of instruments and software, 14% came from consumables, and 19% came from service. The company has three product lines: Mass spectrometry (LC/MS, MALDI-TOF, Q-TOF), HPLC (high pressure liquid chromatography), and Thermal Analysis.

WAT's largest customer segment is the pharmaceutical industry, with 61% of sales in 1999 and 64% of sales in 2000. This segment includes pharmaceutical and biotechnology companies, and generic drug manufacturers. The remaining customers include chemical and polymer manufacturers, food and beverage companies, environmental testing laboratories, universities, and government agencies. In 2000, about 57% of the company's net sales were generated outside of the US.

1. Mass Spectrometry (MS): WAT entered the MS market in September 1997 with its purchase of Micromass, a UK company, for \$175.9 M, or 1.8 times its 1996 sales. The company markets several different types of MS instruments. The most important are quadrupole time-of-flight (TOF), LC/MS, and MALDI-TOF.

a. Quadrupole TOF: Micromass launched the first quadrupole TOF instrument, the Q-TOF, in 1996. It launched an improved instrument, the Q-TOF II, in 1999. The instrument costs about \$500,000. Quadrupole TOF provides highly accurate mass measurements and greater structural information than other techniques (i.e., MALDI-TOF, ion trap) making it particularly useful for

determining the composition of small molecules and the structure of proteins.

Industry estimates of quadrupole TOF instrument sales revenue since 1996 suggest that there are currently about 400 quadrupole TOF instruments in the field. According to Waters, about two thirds of the instruments are owned by pharmaceutical and biotechnology companies. Academic labs own about 20% of the instruments, and government labs and other labs own the remaining 15%.

Use of quadrupole TOF instruments is split about evenly between analysis of small molecules and structural proteomics. We find it interesting that WAT has chosen to publicly emphasize its applications in the more "sexy" proteomics area rather than its more staid chemistry applications. While not actually misrepresenting the product, this emphasis certainly casts the product in a more favorable light for investors.

The success of WAT's quadrupole TOF products has attracted competition to the market. The most advanced competitor is Applied Biosystems (ABI), which launched its version, the QStar, in 1999. Most users we spoke to prefer the Q-TOF because of its superior software. Several suggested that the QStar's hardware is superior to the Q-TOF, and that they would consider the product for future purchases.

In March 2001 WAT launched two new versions of the Q-TOF, the Q-TOF Ultima and the Q-TOF Micro. The Ultima is a higher end product, priced at \$600,000. Users with whom we spoke had not yet decided if the product represents a significant improvement over the Q-TOF II. The Q-TOF Micro is a smaller model priced at \$350,000. While designed to target a more price sensitive group of customers, users suggested that the price was still too high to make it an easily budgeted item.

b. LC/MS: LC/MS systems combine liquid chromatography and mass spectrometry to allow for separation and identification of substances in a single step. There are several different types of MS technology that are incorporated into LC/MS systems. These include single quadrupole, triple quadrupole, ion trap, and time of flight. The technology approach has been evolving for the past 20 years. About half the market for LC/MS is sales to pharmaceutical and biotechnology research labs to identify and characterize compounds. Academic, government and organic chemistry, and other labs make up the rest of the market. The average LC/MS system costs about \$150,000.

WAT's offerings in the LC/MS market include the Quattro Ultima, the Quattro Micro, the ZQ mass detector, and the Alliance HT LC/MS system.

The LC/MS area is highly competitive. ABI is the market leader, with about a 29% share in 1999. ABI has lost share recently to other manufacturers, including Waters, because its product line was aging. However, in March 2001, ABI launched a new LC/MS system (the API 4000) that is intended to reverse the company's market share slide. Waters and ThermoQuest (Finnigan) each

have about a 24% market share. ThermoQuest launched a new product, the TSQ Quantum, in November 2000. Agilent is a recent entry into the market, and has quickly taken 9% market share.

c. MALDI-TOF: MALDI-TOF systems use a special ionization technique and time-of-flight mass spectrometry to determine whether or not a molecule of interest is in a particular sample. The technology was first commercialized in 1991. About 40% of the market is sales to pharmaceutical and biotechnology laboratories. Academic and government labs make up another 43% of demand. MALDI-TOF systems cost around \$150,000.

WAT has limited offerings in this space. Its only MALDI instrument is part of an integrated system called ProteomeWorks sold in collaboration with Bio-Rad.

2. HPLC: HPLC, developed in the 1950s, is the standard technique used to identify and analyze the components of chemicals and materials. Pharmaceutical and life science customers are the most significant users of the technology. The technology is also used by food and beverage companies and environmental testing labs. Instrument prices range from \$15,000-\$60,000.

Unlike other parts of WAT's business, HPLC generates consumable revenue from disposable columns. Industry sources tell us margins on these columns are about 75%, while the company makes virtually nothing on its HPLC equipment.

WAT markets over 100 different HPLC instruments, including the Breeze, Alliance, and CapLC systems. Competitors include Agilent, Hitachi, Dionex, Beckman Coulter, and Thermo Electron.

3. Thermal Analysis: TA systems are used primarily in the plastics and polymers industries. A typical system costs about \$50,000. WAT offers several different TA systems, including the Q Series differential scanning calorimeters and thermogravimetric analyzers, and advanced rheometers. Competitors include Mettler Toledo and PerkinElmer.

4. WAT will see limited revenue from the proteomics craze: The "street" has linked WAT's fortunes to the growth of proteomics, or the study of proteins expressed by genes and their relation to disease. The area is projected to grow quickly, with bulls claiming that the protein research market, with \$850 M in revenue in 2000, will grow 23% per year through 2003. Here is the bullish pitch on WAT and proteomics from a "street" analyst: "Proteomics is the highest growth and most visible emerging application, and Waters instrument sales to this area are growing in excess of 50%....The market for tools used in proteomics is expanding exponentially and Waters TOF product offering, particularly bench top systems, puts it in a commanding leadership position." This is the core of the bull case for WAT. Note that the 50% growth cited is just wrong. WAT management said that Q-TOF growth in 4Q00 was about 40%.

Although WAT clearly has some exposure to proteomics, it is limited to its MS segment (30% of 2000 sales), and more specifically to Q-TOF (11% of 2000 sales). The majority of WAT's products are actually used primarily by pharmaceutical companies doing small molecule research. This is a less exciting segment for bulls to highlight, since overall pharmaceutical research spending was \$17 B in 2000, and growing at only 9%.

We note one other flaw in theoretically equating WAT's potential growth to the growth of proteomics research. WAT's MS products are useful for structural proteomics: identifying the existence of proteins in a sample, and determining the structure of those proteins. They cannot be used for functional proteomics: the study of the function of a protein in healthy and diseased tissue, a step critical to developing drugs with protein information. Such functional information can only be generated by conducting experiments in diseased and healthy cells. Researchers tell us this is where much of the effort (and spending) in proteomics will come from in the future. WAT will not be a participant in this research phase.

5. WAT's products address markets totaling \$3.3 B, with growth of 9% per year: While WAT bulls have focused investor attention on the potential of the mass spectrometry (MS) market, growing at about 17% per year, a more comprehensive look at WAT's businesses shows that MS is only 24% of the market addressed by WAT's products. The remaining 76% of WAT's market (high pressure liquid chromatography and thermal analysis) is growing at only about 6% per year, meaning that the total market for WAT's products is growing at about 9% per year.

Market for WAT Products

Segment	2000 Market Size (M)	% of Total WAT sales	1999-2004 CAGR
HPLC	\$2,200	63%	6.6%
TA	\$312	7%	4.0%
MS	\$794	30%	16.8%
Total	\$3,306	100%	9.0%

Source: Company reports, Strategic Directions International

WAT is the market share leader in the \$2.2 B HPLC market, with a 23% share. This share has remained stagnant since at least 1994, when, according to a WAT 1996 S-1, the company had a 21% share of the \$1.5 B HPLC market. The HPLC market is growing at about 6.6% per year.

WAT is also the market share leader in the \$312M thermal analysis (TA) market, with about 19% market share. The TA market is growing at about 4% per year.

6. As noted above, WAT competes in segments of the MS market with F2000 total sales of \$794 M and growth of about 17%. WAT had about a 28% share of this market in 1999.

MS Market (by sub Segments)

	2000 Revenue	WAT share	1999-2004 CAGR
Quad TOF	\$102	84%	27.7%
LC/MS	550	24%	16.3%
MALDI-TOF	141	9%	10.5%
Total	794	28%	16.8%

Source: Strategic Directions Int'l

The company's strongest market share position is in the quadrupole time-of-flight (TOF) segment, with 84% share in 1999. Product offerings include the Q-TOF and the Q-TOF 2. The first quadrupole TOF instrument was launched in 1996, so it is at an earlier stage of growth than MALDI-TOF (first launched in 1991) and LC/MS (evolving for the past 20 years).

The total quadrupole TOF revenue grew 42% year over year in 2000. Industry consultants expect growth will decelerate over the next few years, and project a CAGR of 24% for the 2000-2004 period. We will discuss this deceleration and its impact on WAT in more detail below.

WAT has a number of offerings in the LC/MS segment, including the Quattro, ZQ, and Alliance HT. The company has about a 24% share of this market, which grew about 16% in 2000. Industry consultants expect growth of LC/MS to remain at about 16% per year through 2004.

The company has fewer offerings in the MALDI-TOF segment, with only a 9% share in 1999. The MALDI-TOF market grew about 11% in 2000, and industry consultants expect growth to remain at about 11% per year through 2004.

7. WAT has been able to grow faster than the total markets for its products due to the fast growth of its MS segment. WAT revenue grew by 14% year over year in 1998 and 1999 and 13% year over year in 2000, even though it is competing in markets growing only 9% per year. This higher growth was driven by MS, which grew 28% in 1998 and 1999 and 27% in 2000.

	Pro Forma 1997	1998	1999	2000
MS Sales	\$115.5	\$148.3	\$189.4	\$241.0
Y-Y % Growth	31%	28%	28%	27%
Non-MS Sales	426.6	470.5	515.0	554.1
Y-Y % Growth	5%	10%	9%	8%
Total Revenue	542.0	618.8	704.4	795.1
Y-Y % Growth	10%	14%	14%	13%

Source: "Street" report, OWS estimates

8. The most rapid growth in WAT's MS line has come from its quadrupole TOF products. As shown in the table below, Q-TOF has been the fastest growing part of WAT's MS line. The rest of the MS business has been growing slightly faster than the 17% growth of the overall MS market.

	Pro Forma 1997	1998	1999	2000
Q-TOF Sales	\$26.0	\$42.0	\$60.5	\$85.7
Y-Y % Growth	261%	62%	44%	42%
Other MS Sales	89.5	106.2	128.9	155.3
Y-Y % Growth	11%	19%	21%	21%

Source: Strategic Directions Int'l, Instrument Business Outlook, OWS estimates

9. The high growth phase for Q-TOF has peaked and should decline. While Q-TOF sales have increased quickly, the high growth period is coming to an end, in our view. The reason is that the market for these products is limited, and is close to saturation. Moreover, additional competition is entering the market, ending WAT's virtual monopoly on the technology.

a. The market for quadrupole TOF instruments is limited by a number of factors. First, the instrument's \$500,000 price tag limits purchase to a small group of laboratories with big research budgets. These labs are at large pharmaceutical/biotechnology companies, proteomics companies, large universities, government entities, and other specialized labs such as independent testing facilities.

Second, the high throughput of the equipment for small molecule applications (just seconds per sample) means that just one or two instruments can easily fulfill the needs of even a large pharmaceutical company. For example, Merck currently fulfills its world-wide small molecule testing needs with just three quadrupole TOF instruments.

Third, many researchers using the instrument for proteomics applications find that sample preparation bottlenecks limit their need for additional quadrupole TOF instruments. They simply cannot make more samples to put through the system. Even large biotechnology companies like Immunex and Genentech only own one or two Q-TOFs.

Finally, the time and expertise needed to analyze the proteomics data coming out of Q-TOF experiments limits their use. Unlike gene sequencing, which provides large volumes of data needing little interpretation, the output from the Q-TOF must be studied and interpreted by experts. There are a limited number of experts, especially in proteomics. Moreover, the analysis of one day's experiments will determine the experiments to be run on subsequent days, slowing down use of the system, and so limiting the number of systems needed.

Our interviews with several large pharmaceutical companies suggest that on average each now has two or three Q-TOFs. These companies suggested that they might buy one or two more units over the next couple of years. We therefore estimate that world-wide, the forty top pharmaceutical/biotechnology companies might each acquire five quadrupole TOF instruments.

A small group of public and private biotechnology companies (e.g., Geneva Proteomics, Caprion Pharmaceuticals, Oxford Glycoscience, Large Scale Biotechnology) specialize in proteomics research. There are about 10 such

companies at present, and we assume five more are founded in 2001-2002. We generously assume each could accommodate 20 instruments (leaving aside whether they could come up with \$10M to pay for them).

Our interviews with university researchers suggest that few labs currently have more than one Q-TOF. Indeed, many labs (even MIT and UCLA) do not yet own a Q-TOF. The price is a tremendous hurdle for most universities, who find it difficult to come up with \$500,000. We estimate that world-wide 40 universities with proteomics and/or advanced mass spectrometry laboratories could accommodate three instruments each. We estimate that 60 government laboratories could accommodate two instruments each. Finally, we estimate that about 60 instruments might be needed by independent testing services and other labs. This yields a total potential market of 800 installations.

b. Quadrupole TOF Market is reaching saturation. Quadrupole TOF was adopted rapidly by researchers. According to a 1999 WAT press release, 150 Q-TOFs were sold from launch in 1996 through June 1999. Revenue estimates from an industry consultant (SDI) suggest that about 400 instruments (from all manufacturers) had been placed by the end of 2000. As shown in the table below, assuming installation revenue increases by 37% in 2001, 641 installations out of 800 potential installations will have been made by the end of this year. With only 159 installations left, the market would be fully saturated before the middle of 2002. As a result, continued 37% year over year growth for Q-TOF does not seem realistic. We think Q-TOF revenue growth will drop off quickly, from 37% growth in 2001 to 26% growth in 2002.

Strategic Directions, the leading analytical instrument market consultant has estimated that the compound annual growth rate for quadrupole time of flight instruments from 1999-2004 should be 28%. However, SDI acknowledged that this would be heavily front end loaded, since 2000 would grow at 42%, and 2001-2004 would be about 24% CAGR, consistent with our estimates.

Quadrupole TOF Instrument Sales (all vendors) would exceed the market size at a theoretical 37% growth in 2001 and 2002:

	1996	1997	1998	1999	2000e	2001e	2002e
Revenue	\$5	\$11	\$33	\$64	\$88	\$121	\$166
# units	10	22	65	128	176	240	331
CumTotal	10	32	97	225	401	641	972

Source: Strategic Directions Int'l and OWS estimates

c. Competition is intensifying. In addition to rapidly approaching saturation of its market, WAT must also contend with increased competition for available installations. Several new products have been launched in the past few months that compete for the same customers. The most significant is an improved QStar from Applied Biosystems. Researchers with whom we spoke think the Q-TOF is still the best overall instrument, but think the QStar will become more competitive if Applied Bio can improve its software package.

The high price of the Q-TOF has forced many researchers with low

budgets to find ways to make lower priced instruments work for their proteomics experiments. Our interviews with university researchers suggest that many are finding ways to utilize ion trap technologies (such as the LCQ Deca from Thermo Electron) for their proteomics research. With a price tag of under \$250,000, the TCQ is easier to budget, and academic researchers say it can meet most of their needs.

10. Since WAT's businesses outside of Q-TOF have steady or declining growth, a slowdown in Q-TOF growth would make it difficult to grow the business by the 14%-15% expected by the "street."

WAT does not break out sales for each of its product segments in its financial reporting, but the company and "street" reports provide guidance on sales of HPLC, TA and MS products. We have used these sources to develop historical revenue estimates for each segment shown in the table below. Note that these revenue and growth numbers are pro forma, and include revenue from the Thermal Analysis acquisition in May 1996 and the Micromass acquisition in September 1997.

We estimate that WAT's other MS business (excluding Q-TOF) grew 21% in 1999 and 20% in 2000. With no new technologies to offer, and increased competition from ABI's new LC/MS instrument, we expect growth of MS sales other than Q-TOF to continue to slow.

We estimate WAT's HPLC growth was about 8% in 2000, down from 11% in 1998 and 10% in 1999. This growth was ahead of estimated market growth of 6.6%. However, industry consultants tell us they think WAT may be allocating some MS sales to HPLC in order to mask the poor results of this product line. When MS growth begins to decline, how will the company bolster HPLC sales?

We estimate that TA growth has been in line with the market at around 4% per year. The company does not break out this segment, but has acknowledged "single digit" growth in all but one quarter since 1Q99. New product launches are expected in 2001, but bulls do not anticipate a revenue impact until the end of the year.

WAT Pro Forma Revenue

	1997	1998	1999	2000
Q-TOF	\$26.0	\$42.1	\$60.5	\$85.7
Other MS	89.5	106.2	128.9	155.3
Total MS	115.5	148.3	189.4	241.0
HPLC	378.6	420.0	462.1	499.0
TA	48.0	50.4	52.9	55.0
Total	542.0	618.8	704.4	795.1

Source: OWS estimates, company filings

Pro Forma Y-Y % Change

	1997	1998	1999	2000
Q-TOF	261%	62%	44%	42%
Other MS	11%	19%	21%	20%
Total MS	31%	28%	28%	27%
HPLC	6%	11%	10%	8%
TA	2%	5%	5%	4%
Total	10%	14%	14%	13%

11. Slowing growth in Q-TOF, along with slower than expected growth in other parts of WAT's business, is likely to cause the company to miss "street" revenue expectations in 2001 and beyond. "Street" analysts' revenue projections for 2001 revenues include 27% growth in MS sales, 10% growth in HPLC sales, and 9% growth in TA sales, for total revenue growth of 14% year over year. We think each of these growth rates will be difficult to achieve, and project 2001 revenue growth of 13% in 2001.

With Q-TOF reaching saturation, it will be difficult to maintain MS growth at the rates needed to meet "street" estimates. We conservatively assume that Q-TOF growth will slow from 42% year over year in 2000 to 37% in 2001. We also assume that the rest of WAT's MS sales grow 19% in 2000, versus 20% in 2001. This puts growth in MS at 25% in 2001.

HPLC sales grew only 8% year over year in 2000. With no new product introductions and a slowing economy, it seems unlikely that the company will achieve more than the 8% growth we estimate for 2001.

TA sales have been stagnant at 4%-5% year over year growth for several years. While the division is introducing new products in 2001, it seems unlikely this will provide the boost to sales sought by the "street." We estimate TA sales will increase 6% year over year in 2001.

In 2002, "street" analysts project 25% year over year growth for MS, 11% growth for HPLC, and 10% growth for TA, for total revenue growth of 15.6%. We project 20% growth for MS (with 26% growth for Q-TOF), 8% growth for HPLC, and 6% growth for TA, for total revenue growth of 12%.

12. Gross margin expansion has stalled. As shown in the table below, WAT's gross margins have expanded as the Q-TOF business has grown. This makes sense, since the Q-TOF has virtually no competition. However, once the Q-TOF market is saturated, we would expect margins to decline. Indeed, the fact that total WAT margin expansion has stalled even though Q-TOF continues to be a larger part of the business suggests that margins may already be declining on the Q-TOF.

	1998	1999	2000
Q-TOF % Rev	6.8%	8.6%	10.8%
Gross margin	59.8%	63.5%	63.7%

13. WAT could be impacted by slowdown in manufacturing sectors of economy. WAT boasts that 70% of its revenue is from life science customers, an economic sector viewed by many as somewhat "recession proof." However, 30% of revenue comes from industrial uses of HPLC, TA, and MS. This part of WAT's business may be significantly affected by an economic slowdown.

A look back at historic HPLC sales shows the impact that an economic slowdown could have on this business. During the period 1991-1994, WAT's HPLC business experienced no growth at all.

#### WAT HPLC Sales

	1991	1992	1993	1994
HPLC Sales (M)	\$301	\$309	\$305	\$307
Y-Y % change		2.9%	(1.4%)	0.7%

The TA business should also be negatively impacted by an economic slowdown, since these products are used in the design and fabrication of automotive, packaging, construction and home electronics products.

14. There is evidence that life science sector is also exposed to lower stock market valuations and economic conditions. The decline in biotechnology shares is likely to have a negative effect on big ticket equipment purchases such as the Q-TOF, in our view. With share prices depressed, and with capital market less friendly to new ideas, it seems logical that companies ramping up proteomic efforts that would require Q-TOFs would scale back their purchases to conserve cash.

Indeed, we have already seen an example. Genaissance Pharmaceuticals recently said that it would delay an order for gene sequencers from Applied Biosystems. "Street" reports put the value of the order at \$10.5 M (35 \$300,000 sequencers). The delay surprised many ABI bulls, who had assumed that biotechnology companies would continue to invest at high rates in order to secure their place during this early stage in the genomics/proteomics revolution.

We note that according to WAT's 2000 10-K, actual charge-offs increased from \$422,000 in 1999 to \$2.2 M in 2000. The reserve at the end of 2000 was \$2.8M, and \$1.3M had been added to reserves in 2000. It may not be enough. We doubt that big pharmaceutical companies, government or academic institutions are failing to pay their bills. Therefore, this may be early evidence that more speculative biotechnology companies are facing cash problems.

15. WAT's new products unlikely to provide much growth. WAT introduced several new products in early 2001. None represents a new technology, but instead all are repackaged WAT products.

a. Q-TOF Ultima: The Ultima is a higher end Q-TOF designed specifically for proteomics applications, priced at over \$500K. With an optional MALDI attachment, the price increases to \$600K. We note that ABI launched its QStar

with a MALDI attachment in 2000. Some researchers with whom we spoke were excited about the MALDI attachment, while others thought it was of little value. No one thought they would replace their current instrument with an Ultima, though they would consider it for any future Q-TOF purchases. The instrument is expected to begin shipping in May/June.

b. Q-TOF Micro: The Micro is a lower end (\$350K) Q-TOF designed for routine use in proteomics. Researchers with whom we spoke did not see the price as being low enough to prompt new purchases, since it is still regarded as a "big ticket" item. Shipments are expected to start in May/June.

c. ZQ Mass Detector: Launched in 4Q00, this product is a bench top LC/MS priced at about \$150K. It product may cannibalize sales from the company's more expensive LC/MS instruments.

d. Quattro Micro: This is a smaller version of the company's Quattro Ultima. It is 5x less sensitive than Quattro Ultima, and is priced at \$250,000 versus \$350,000 for the Ultima. The product competes with the TSQ Quantum from Thermo Electron and the ABI 2000 from Applied Biosystems.

16. Caprion Deal and other investments: WAT made several investments in 2000 that could help prop up revenue growth in future quarters.

In December 2000, WAT entered an agreement with Caprion Pharmaceuticals, a private proteomics company based in Montreal, to make a \$7.5 M equity investment. According to press reports, Caprion will use this money to purchase 15-18 WAT MS instruments (most likely Q-TOFs).

According to WAT's 2000 10-K, WAT had paid Caprion \$3.5 M under the agreement as of December 31. If this payment was immediately converted into revenue for WAT, the impact on year over year revenue growth in the quarter was substantial. Taking \$3.5 M out of WAT's 4Q sales would result in a 4Q year over year revenue increase of only 10.6%, versus the 12.4% reported. The remaining \$4 M in revenue can be used by WAT to manage revenue growth in future quarters. This strategy provides short term revenue protection, but creates the possibility of more dramatic drops in revenue after the investment has been exhausted.

In July 2000, WAT made a \$7.5 M equity investment in Varigenics, a company using mass spectrometry for SNP genotyping. We have not seen press reports indicating whether or not Varigenics will be buying WAT instruments with the money, but given its business, it seems natural that they will.

17. DSO is rising. WAT has had a difficult time managing its DSO for the past two quarters. In 1999, DSO was 64-69 each quarter. In 2000, DSO was 74 in Q1, 68 in Q2, 77 in Q3, and 75 in Q4.

18. Free cash flow is good, but R&D spending seems too low to sustain high

growth. In 2000, FCF was \$140 M on net income of \$156M. We note, however, that the company invests only about 5% of sales in R&D. ABI, the largest MS competitor spends 11% of revenue on R&D. Interestingly, prior to being acquired by WAT, Micromass was investing 8% of sales in R&D. We wonder if WAT will be able to develop cutting edge technologies with such a low level of investment.

19. WAT's valuation appears very high relative to its peers and relative to its own historical valuations. The shares would be cut in half if they were to trade in line with their historical valuation. The fact that they are so much more expensive than the peer group should limit the risk.

On a trailing P/E basis, WAT shares are currently trading at about a 75% premium to the shares of most of its peer group. It is trading at a 11%-30% premium to ABI and Thermo Electron, who also have plays in the mass spectrometry area (and are vulnerable to the same market saturation risks as WAT). In terms of its PSR, WAT shares are trading nearly 100% higher than its nearest peer. As Q-TOF sales growth slows due to market saturation, we think investors will begin to understand that WAT is not a long term high growth stock, and thus should be awarded a lower P/E and PSR.

Comparative Valuation Based on Closing Price 3/30/01

	Trailing 12 mo P/E	Forward P/E	PSR
Waters	41	36	8.0
Applied Biosystems	32	29	4.3
Thermo Electron	37	23	1.7
Mettler Toledo	24	21	1.6
Millipore	19	20	2.3
Agilent	21	19	1.2
Dionex	22	20	4.1
PerkinElmer	26	17	1.6

The table below presents historic earnings and sales multiples for WAT over the past four years. In our view, 2000 was an aberrant year, with share prices fueled by the hype surrounding the mapping of the human genome. Leaving 2000 aside, we can see that, with a trailing P/E of 41 and PSR of 8 on March 30, 2001 WAT shares are well above their historic mean valuation. As growth slows, we would expect shares to trade closer to mean historic values, suggesting the appropriate P/E for WAT shares is about 23 times, or \$26 per share currently, and an appropriate PSR is 4, or \$23 per share. As a result, we think that WAT shares could be cut in half from current levels.

WAT share valuation history

	High P/E	Low P/E	High PSR	Low PSR
2000	79	19	15.5	3.8
1999	36	21	6.3	3.6
1998	32	13	4.6	1.9
1997	23	11	2.9	1.5

20. Financial projections.

The assumptions behind our revenue projections are detailed in item 11 above. We assume gross margins begin to decline from 64% in 2000 and 2001 to 63% in 2002 as the Q-TOF market becomes saturated. We assume cash flow remains strong, We assume income taxes decline from 26% in 2000 to 25% in 2001 and 2002, in line with "street" guidance.

	1999	2000	2001	2002
HPLC	462,056	499,020	538,942	582,057
Thermal Analysis	52,920	55,037	58,339	61,839
MS	189,424	241,014	301,267	361,521
Total Revenue	704,400	795,071	898,548	1,005,417
Cost of Sales	257,136	288,264	325,512	372,004
Sell./Gen./Admin.	226,593	246,390	281,300	311,000
Research/Development	36,094	42,513	47,000	52,000
Goodwill Amort.	8,068	7,077	6,900	6,500
Total Expenses	527,891	584,244	660,712	741,504
Operating Income	176,509	210,827	237,841	263,913
Interest Expense,Net	-8,948	135	7,064	12,824
Income Before Taxes	167,561	210,962	244,906	276,737
Income Taxes	45,243	54,945	61,226	69,184
Income After Taxes	122,318	156,017	183,679	207,553
Preferred Dividends	-442	0	0	0
Net income to stkhldrs	121,876	156,017	183,679	207,553
Accounting Change	0	-10,771	0	0
Diluted EPS	0.92	1.14	1.32	1.47
Diluted Average Shs.	132,632	136,743	138,750	140,831
Y-Y % change	1999	2000	2001	2002
HPLC	10%	8%	8.0%	8.0%
Thermal Analysis	5%	4%	6.0%	6.0%
MS	28%	27%	25.0%	20.0%
Total Revenue	13.8%	12.9%	13.0%	11.9%
Cost of Sales	3%	12%	13%	14%
Sell./Gen./Admin.	10%	9%	14%	11%
Research/Development	5%	18%	11%	11%
Goodwill Amort.	-14%	-12%	-3%	-6%
Total Expenses	6%	11%	13%	12%
Operating Income	29%	19%	13%	11%
Interest Expense,Net	-51%	-102%	5133%	82%
Income Before Taxes	42%	26%	16%	13%
Income Taxes	67%	21%	11%	13%
Income After Taxes	35%	28%	18%	13%
Net income to stkhldrs	36%	28%	18%	13%
Diluted EPS	33%	24%	16%	11%

% Net Sales	1999	2000	2001	2002
HPLC	66%	63%	60%	58%
Thermal Analysis	8%	7%	6%	6%
MS	27%	30%	34%	36%
Total Revenue	100%	100%	100%	100%
Cost of Sales	37%	36%	36%	37%
Sell./Gen./Admin.	32%	31%	31%	31%
Research/Development	5%	5%	5%	5%
Goodwill Amort.	1%	1%	1%	1%
Total Expenses	75%	73%	74%	74%
Operating Income	25%	27%	26%	26%
Interest Expense,Net	-1%	0%	1%	1%
Income Before Taxes	24%	27%	27%	28%
Income Taxes	6%	7%	7%	7%
Income After Taxes	17%	20%	20%	21%

	1Q99	2Q99	3Q99	4Q99
HPLC	107,443	113,705	110,866	129,832
Thermal Analysis	12,829	13,782	12,318	14,047
MS	40,091	44,793	47,905	56,789
Total Revenue	160,362	172,280	171,090	200,668
Cost of Sales	60,622	63,712	61,903	70,899
Sell./Gen./Admin.	54,504	55,537	57,075	59,477
Research/Development	8,686	9,021	8,634	9,753
Goodwill Amort.	2,045	2,034	1,999	1,990
Total Expenses	125,857	130,304	129,611	142,119
Operating Income	34,505	41,976	41,479	58,549
Interest Expense,Net	-3,033	-2,379	-1,794	-1,742
Income Before Taxes	31,472	39,597	39,685	56,807
Income Taxes	8,498	10,691	10,715	15,339
Income After Taxes	22,974	28,906	28,970	41,468
Preferred Dividends	-244	-245	-247	294
Net income to stkhldrs	22,730	28,661	28,723	41,762
Diluted EPS	0.17	0.22	0.22	0.31
Diluted Average Shs.	131,680	132,334	133,222	133,292

% Net Sales	1Q99	2Q99	3Q99	4Q99
HPLC	67%	66%	65%	65%
Thermal Analysis	8%	8%	7%	7%
MS	25%	26%	28%	28%
Total Revenue	100%	100%	100%	100%
Cost of Sales	38%	37%	36%	35%
Sell./Gen./Admin.	34%	32%	33%	30%
Research/Development	5%	5%	5%	5%
Goodwill Amort.	1%	1%	1%	1%
Total Expenses	78%	76%	76%	71%
Operating Income	22%	24%	24%	29%
Interest Expense,Net	-2%	-1%	-1%	-1%
Income Before Taxes	20%	23%	23%	28%
Income Taxes	5%	6%	6%	8%
Income After Taxes	14%	17%	17%	21%

	1Q00	2Q00	3Q00	4Q00
HPLC	115,329	125,354	119,011	139,364
Thermal Analysis	12,614	13,819	13,437	15,109
MS	52,259	58,235	59,505	71,035
Total Revenue	180,202	197,408	191,953	225,508
Cost of Sales	66,340	71,777	70,293	79,854
Sell./Gen./Admin.	60,395	61,060	59,712	65,223
Research/Development	10,362	10,557	10,394	11,200
Goodwill Amort.	1,811	1,760	1,755	1,751
Total Expenses	138,908	145,154	142,154	158,028
Operating Income	41,294	52,254	49,799	67,480
Interest Expense,Net	-701	-343	322	857
Income Before Taxes	40,593	51,911	50,121	68,337
Income Taxes	10,640	13,102	13,435	17,768
Income After Taxes	29,953	38,809	36,686	50,569
Net income to stkhldrs	29,953	38,809	36,686	50,569
Accounting Change	0	0	0	-10,771
Diluted EPS	0.22	0.28	0.27	0.37
<b>Y-Y % change</b>	<b>1Q00</b>	<b>2Q00</b>	<b>3Q00</b>	<b>4Q00</b>
HPLC	7%	10%	7%	7%
Thermal Analysis	-2%	0%	9%	8%
MS	30%	30%	24%	25%
Total Revenue	12.4%	14.6%	12.2%	12.4%
Cost of Sales	9%	13%	14%	13%
Sell./Gen./Admin.	11%	10%	5%	10%
Research/Development	19%	17%	20%	15%
Goodwill Amort.	-11%	-13%	-12%	-12%
Total Expenses	10%	11%	10%	11%
Operating Income	20%	24%	20%	15%
Interest Expense,Net	-77%	-86%	-118%	-149%
Income Before Taxes	29%	31%	26%	20%
Income Taxes	25%	23%	25%	16%
Income After Taxes	30%	34%	27%	22%
Net income to stkhldrs	32%	35%	28%	21%
Diluted EPS	28%	32%	24%	17%
<b>% Net Sales</b>	<b>1Q00</b>	<b>2Q00</b>	<b>3Q00</b>	<b>4Q00</b>
HPLC	64%	64%	62%	62%
Thermal Analysis	7%	7%	7%	7%
MS	29%	30%	31%	32%
Total Revenue	100%	100%	100%	100%
Cost of Sales	37%	36%	37%	35%
Sell./Gen./Admin.	34%	31%	31%	29%
Research/Development	6%	5%	5%	5%
Goodwill Amort.	1%	1%	1%	1%
Total Expenses	77%	74%	74%	70%
Operating Income	23%	26%	26%	30%
Interest Expense,Net	0%	0%	0%	0%
Income Before Taxes	23%	26%	26%	30%
Income Taxes	6%	7%	7%	8%
Income After Taxes	17%	20%	19%	22%

	1Q01e	2Q01e	3Q01e	4Q01e
HPLC	124,556	135,382	128,532	150,513
Thermal Analysis	13,371	14,648	14,243	16,016
MS	65,323	72,794	74,382	88,794
Total Revenue	203,250	222,824	217,156	255,322
Cost of Sales	75,202	80,217	78,176	91,916
Sell./Gen./Admin.	68,000	70,000	69,000	74,300
Research/Development	11,000	11,500	12,000	12,500
Goodwill Amort.	1,740	1,730	1,720	1,710
Total Expenses	155,942	163,447	160,896	180,426
Operating Income	47,307	59,378	56,260	74,896
Interest Expense,Net	1,226	1,586	1,946	2,306
Income Before Taxes	48,534	60,964	58,206	77,202
Income Taxes	12,133	15,241	14,552	19,301
Income After Taxes	36,400	45,723	43,655	57,902
Net income to stkhldrs	36,400	45,723	43,655	57,902
Diluted EPS	0.26	0.33	0.31	0.42
Diluted Average Shs.	138,000	138,500	139,000	139,500

Y-Y % change	1Q01	2Q01	3Q01	4Q01
HPLC	8%	8%	8%	8%
Thermal Analysis	6%	6%	6%	6%
MS	25%	25%	25%	25%
Total Revenue	13%	13%	13%	13%
Cost of Sales	13%	12%	11%	15%
Sell./Gen./Admin.	13%	15%	16%	14%
Research/Development	6%	9%	15%	12%
Goodwill Amort.	-4%	-2%	-2%	-2%
Total Expenses	12%	13%	13%	14%
Operating Income	15%	14%	13%	11%
Interest Expense,Net	-275%	-562%	504%	169%
Income Before Taxes	20%	17%	16%	13%
Income Taxes	14%	16%	8%	9%
Income After Taxes	22%	18%	19%	15%
Net income to stkhldrs	22%	18%	19%	15%
Diluted EPS	19%	16%	18%	13%

% Net Sales	1Q01	2Q01	3Q01	4Q01
HPLC	61%	61%	59%	59%
Thermal Analysis	7%	7%	7%	6%
MS	32%	33%	34%	35%
Total Revenue	100%	100%	100%	100%
Cost of Sales	37%	36%	36%	36%
Sell./Gen./Admin.	33%	31%	32%	29%
Research/Development	5%	5%	6%	5%
Goodwill Amort.	1%	1%	1%	1%
Total Expenses	77%	73%	74%	71%
Operating Income	23%	27%	26%	29%
Interest Expense,Net	1%	1%	1%	1%
Income Before Taxes	24%	27%	27%	30%
Income Taxes	6%	7%	7%	8%
Income After Taxes	18%	21%	20%	23%