

Complete Genomics, Inc.

Review of First-Quarter Results; Still at an Early Stage But Company Continues to Gain Traction

- Complete Genomics (CGI) announced first-quarter results after the close Monday. Revenue of \$6.8 million exceeded our and consensus estimates of \$5.5 million. In addition, Complete Genomics reported a \$0.48 loss versus our \$0.51 loss and consensus of \$0.52 loss.
- Outperformance relative to our model was primarily driven by higher revenue per genome, which we believe declined only slightly from last quarter. The company is on track to add 8 more instruments by August and to introduce an array of improvements this year. Thus, we have modeled an ASP decline that accelerates in the back half of the year and continue to expect CGI to exit the year at an ASP of roughly \$5,000.
- Complete Genomics shipped more than 600 genomes in the quarter in line with its recent preannouncement and essentially in line with our target of 600 genomes. Management indicated that it plans to ship more than 900 genomes in the second quarter (greater than our 826 target), which points to Complete's ongoing traction.
- The company has signed orders for 2,100 genomes year to date (which is 45% of our 4,700 target for the year and does not include the pending National Cancer Institute order for 1,128 genomes). Thus we continue to feel comfortable with our revenue estimate of \$36 million for the year.
- Gross margin was much better than expected this quarter at 4% versus our target of -33%, which points to inherent leverage in the model. Although management expects this metric to bounce around for the remainder of the year, given that we assume sample volume improves quarterly throughout the year we model gross margin of 14% in 2011 and 53% in 2012.
- The stock has performed well in recent trading (up 96% since March 14, 2011) and is now trading at an EV/sales multiple of 4.8 times (using the company's projected 2012 revenue and cash balance. Although this is an early-stage company and thus carries significant commercialization risk and volatility, we are maintaining an Outperform, based on our belief in the long-term viability of the business model.

Healthcare | Life Sciences

May 10, 2011

Stock Rating: **Outperform**

Company Profile: **Aggressive Growth**

Symbol: GNOM (NASDAQ)

Price: \$14.02 (52-Wk.: \$7-\$17)

Market Value (mil.): \$384

Fiscal Year End: December

Long-Term EPS Growth Rate:

Dividend/Yield: None

	2010A	2011E	2012E
Estimates			
EPS Q1	(\$3.36)	A(\$0.48)	(\$0.32)
Q2	(\$2.96)	(\$0.57)	(\$0.26)
Q3	(\$4.88)	(\$0.50)	(\$0.19)
Q4	(\$0.69)	(\$0.39)	(\$0.05)
FY	(\$13.60)	(\$1.94)	(\$0.81)
CY		(\$1.94)	(\$0.81)
Sales (mil.)	9	36	83
Valuation			
FY P/E	NM	NM	NM
CY P/E		NM	NM

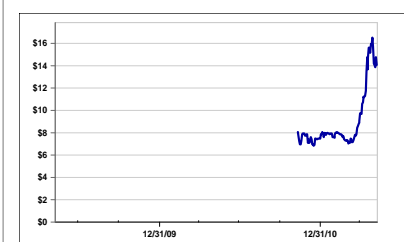
Trading Data (Thomson Financial)

Shares Outstanding (mil.)	26
Float (mil.)	NA
Average Daily Volume	154,143

Financial Data (Thomson Financial)

Long-Term Debt/Total Capital (MRQ)	NA
Book Value Per Share (MRQ)	NA
Enterprise Value (mil.)	308.6
EBITDA (TTM)	-39.6
Enterprise Value/EBITDA (TTM)	-7.8x
Return on Equity (TTM)	-78.3

Two-Year Price Performance Chart



Source: Thomson Financial, William Blair & Company estimates

Amanda Murphy, CFA
312.364.8951
amurphy@williamblair.com

Sylvia Chao
312.364.8654
schao@williamblair.com

Complete Genomics offers whole-human-genome sequencing services using its proprietary sequencing platform. Incorporated in 2005, CGI began commercial operations in 2010 and raised more than \$50 million in an IPO in late 2010.

William Blair & Company, L.L.C. receives or seeks to receive compensation for investment banking services from Complete Genomics, Inc. Investors should consider this report as a single factor in making an investment decision.

Please consult the last page of this report for all disclosures.

Investment Conclusions

After the market open Monday, Complete Genomics reported first-quarter results that were better than expected despite the company's recent (positive) pre-announcement. Revenue of \$6.8 million exceeded our and consensus estimates of \$5.5 million. In addition, Complete Genomics reported a \$0.48 loss versus our \$0.51 loss and consensus of \$0.52 loss.

Outperformance relative to our model was primarily driven by higher revenue per genome, which we believe declined only slightly from last quarter (at an estimated average of \$10,500 per genome versus an estimated \$10,700 in the fourth quarter). Illumina recently announced that it has lowered the list price of its whole human genome services to \$5,000 per genome and \$4,000 for orders of 50 or more genomes (down from \$9,500 for patients where sequencing could provide direct clinical value). Thus, we suspect that quite a bit of attention will be paid to Complete Genomics' pricing on a comparative basis. Although the company's price (and therefore revenue) was higher than we modeled, CGI is on track to add 8 more instruments by August and has successfully improved the density of its array to 6 billion spots (versus the prior 3 billion), which is likely to be launched commercially this year. Thus, we believe Complete is on track to drive its ASP down in the back half of the year, to exit the year at roughly \$5,000; we also model a decline in realized ASP that escalates in the second part of the year.

Complete Genomics shipped more than 600 genomes in the quarter, in line with its recent preannouncement and essentially in line with our target of 600 genomes. Management indicated it plans to ship more than 900 genomes in the second quarter (greater than our 826 target), which points to the company's ongoing traction. We note that the number of genomes shipped per quarter is dependent on when CGI receives the samples, and thus we may see some volatility quarter to quarter. However, management does seem to have decent visibility into its greater than 900 target for the second quarter. In addition, the company has signed orders for 2,100 genomes year to date (which is 45% of our 4,700 target for the year and does not include the pending National Cancer Institute order for 1,128 genomes). Thus, we continue to feel comfortable with our revenue estimate of \$36 million for the year.

Although volatile, the stock has performed well in recent trading (up 96% since March 14, 2011) and thus appears to reflect some of this excitement. The stock is now trading at an EV/sales multiple of 4.8 times (using the company's projected 2012 revenue and cash balance). Although Complete Genomics is an early-stage company and therefore carries significant commercialization risk, there continue to be indications that its model is gaining traction (including a building repertoire of peer-reviewed publications, customers, and backlog). We believe CGI offers a differentiated model that facilitates a continued reduction in cost for researchers, and thus is positioned to gain share of the developing whole-human-genome sequencing market. In our view, Complete Genomics represents a compelling way for small-cap investors to participate in the high-growth sequencing market and/or a diversification mechanism for investors concerned about the ability of researchers to secure funding for large-box purchases—particularly long-term investors that can stomach higher volatility associated with early-stage companies. Therefore, despite the recent stock performance, we maintaining our Outperform rating, which reflects our belief in the long-term viability of the business model

Other Key Points

- 1) Gross margin was much better than expected this quarter at 4%, versus our target of -33%, which points to inherent leverage in the model. Although management expects this metric to bounce around for the remainder of the year, given that we assume sample volume improves quarterly throughout the year we model gross margin of 14% in 2011 and 53% in 2012.
- 2) Although turnaround time has been a concern for investors, Complete continues to make progress in reducing this metric. Average turnaround time was 70 days in the quarter; Complete is on track to reduce this number to 60 by the end of 2011 as promised (and potentially below this number). Management expects turnaround time to average 30 days by the end of 2012.
- 3) SG&A spend of \$5.5 million was slightly ahead of our \$4.8 million estimate. Complete continues to expand its salesforce and expects to double it from 12 to 24 by the end of the

year. We increased our SG&A estimates by \$1 million for 2011, to \$25 million. R&D spend of \$6.8 million was essentially in line with our target of \$6.7 million.

- 4) Complete Genomics has shipped 100 of the National Cancer Institute (NCI) genomes, which is still in the process of validating that data. Thus, it is not clear when Complete will recognize revenue for those genomes (although we suspect it will be in the second or third quarter). The NCI order is not included in the 900 genomes the company expects to ship in the second order, and the pending order for 1,128 genomes is not included in the 2,100 orders the company has secured.
- 5) Given Illumina (ILMN \$73.27; Outperform) also recently announced the wide scale availability of its version 3 of its reagent kit, which effectively triples the output of its HiSeq platform, we are not surprised by Illumina's price reduction. To date although Illumina has partnered with two service providers, it is performing the majority of the whole human genome sequencing in-house. Illumina's per genome reagent cost on a list price base is now \$5,000. Assuming a 70% gross margin, this suggests an actual cost of roughly \$1,500. Thus, although Illumina's price reduction could be viewed as a negative for Complete Genomics, we believe the market is large enough for both players; that both Illumina and Complete Genomics may already have been pricing fairly close to the \$5,000 mark for large orders; and that Illumina is still exhibiting rational pricing based on our assumptions for its reagent cost.

First Quarter Variance Analysis

May 9, 2011

	1Q 2011 (Actual)	1Q 2010 (Actual)	Year/Year % Change	1Q 2011 (Estimate)	Year/Year % Change	Difference Actual - Est.
Total Revenue	\$6,833	\$336	1933.6%	\$5,520	1542.9%	\$1,313
Cost of Revenue	\$6,582	4,077	61.4%	7,320	79.5%	-\$738
Gross Profit	251	-3,741	-106.7%	-1,800	-51.9%	\$2,051
R&D	6,808	6,169	10.4%	6,717	8.9%	\$91
SG&A	5,480	4,325	26.7%	4,837	11.8%	\$643
Operating income	-12,037	-14,235	-15.4%	-13,354	-6.2%	\$1,317
Interest Expense and Other (net)	424	101	319.8%	130	28.7%	\$294
Earnings before tax	-12,461	-14,336	-13.1%	-13,484	-5.9%	\$1,023
Income taxes	0	0	NM	0	NM	\$0
Net Income (GAAP)	-\$12,461	-\$14,336	-13.1%	-\$13,484	-5.9%	\$1,023
Shares outstanding	25,960	4,271	507.8%	26,200	513.4%	-240
EPS (GAAP)	-\$0.48	-\$3.36	-85.7%	-\$0.51	-84.7%	\$0.03
% of Total Revenue:			<u>Change</u>		<u>Change</u>	
Gross Profit	4%	-1113%	1117%	-33%	1081%	36%
R&D	100%	1836%	-1736%	122%	-1714%	-22%
SG&A	80%	1287%	-1207%	88%	-1200%	-7%
Operating income	-176%	-4237%	4060%	-242%	3995%	66%
Net income	-182%	-4267%	4084%	-244%	4022%	62%
Effective tax rate	0%	0%	0%	0%	0%	0%

Complete Genomics, Inc
Projected Income Statement (2008 to 2013E)

	2008	2009	Q1'10	Q2'10	Q3'10	Q4'10	2010	Q1'11	Q2'11E	Q3'11E	Q4'11E	2011E	2012E	2013E	2014E
Revenue:															
Total Revenue	-	\$623	\$336	\$1,089	\$4,161	\$3,803	\$9,389	\$6,833	\$8,190	\$9,555	\$11,593	\$36,171	\$82,964	\$133,333	\$188,743
Cost of Revenue	-	5,033	4,077	4,908	6,007	4,903	19,895	6,582	7,735	8,026	8,612	30,955	39,182	48,135	60,254
Gross Profit	-	(\$4,410)	(\$3,741)	(\$3,819)	(\$1,846)	(\$1,100)	(\$10,506)	\$251	\$455	\$1,529	\$2,981	\$5,216	\$43,782	\$85,198	\$128,489
R&D	23,633	22,424	6,169	4,928	4,954	5,640	21,691	6,808	8,366	7,835	6,956	29,965	34,197	43,703	50,634
SG&A	4,224	6,751	4,325	3,076	3,921	4,134	15,456	5,480	6,616	6,689	6,260	25,045	31,218	40,218	46,468
Total Operating Expenses	27,857	29,175	10,494	8,004	8,875	9,774	37,147	12,288	14,982	14,524	13,216	55,010	65,415	83,921	97,101
Operating Income	(27,857)	(33,585)	(14,235)	(11,823)	(10,721)	(10,874)	(47,653)	(12,037)	(14,527)	(12,995)	(10,235)	(49,794)	(21,632)	1,277	31,387
Interest Expense (Income) and Other, net	537	2,364	101	808	9,735	(610)	10,034	424	336	365	394	1,519	1,576	1,779	1,931
Pretax Income	(\$28,394)	(\$35,949)	(\$14,336)	(\$12,631)	(\$20,456)	(\$10,264)	(\$57,687)	(\$12,461)	(\$14,863)	(\$13,360)	(\$10,630)	(\$51,313)	(\$23,208)	(\$502)	\$29,457
Income Tax Expense (Benefit)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Income (excl. non-recurr items)	(\$28,394)	(\$35,949)	(\$14,336)	(\$12,631)	(\$20,456)	(\$10,264)	(\$57,687)	(\$12,461)	(\$14,863)	(\$13,360)	(\$10,630)	(\$51,313)	(\$23,208)	(\$502)	\$29,457
Stock-Based Comp	336	1,410	540	349	422	440	1,751	820	819	764	812	3,215	4,150	6,000	8,493
Tax Adjustments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stock-Based Comp (net of tax)	336	1,410	540	349	422	440	1,751	820	819	764	812	3,215	4,150	6,000	8,493
Adjusted Net Income (excl. stock-based comp)	(28,058)	(34,539)	(13,796)	(12,282)	(20,034)	(9,824)	(55,936)	(11,641)	(14,044)	(12,595)	(9,818)	(48,099)	(19,058)	5,498	37,950
Non Recurring Items	-	-	-	-	(405)	-	(405)	-	-	-	-	-	-	-	-
Tax Adjustments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non Recurring Items (net of tax)	-	-	-	-	(405)	-	(405)	-	-	-	-	-	-	-	-
Net Income (GAAP)	(\$28,394)	(\$35,949)	(\$14,336)	(\$12,631)	(\$20,861)	(\$10,264)	(\$58,092)	(\$12,461)	(\$14,863)	(\$13,360)	(\$10,630)	(\$51,313)	(\$23,208)	(\$502)	\$29,457
EPS (excl. non-recurr. Items)	(\$305.32)	(\$386.56)	(\$3.36)	(\$2.96)	(\$4.79)	(\$0.69)	(\$13.51)	(\$0.48)	(\$0.57)	(\$0.50)	(\$0.39)	(\$1.94)	(\$0.81)	(\$0.02)	\$0.96
Adjusted EPS (excl. stock-based comp)	(\$301.71)	(\$371.40)	(\$3.23)	(\$2.88)	(\$4.69)	(\$0.66)	(\$13.10)	(\$0.45)	(\$0.53)	(\$0.47)	(\$0.36)	(\$1.81)	(\$0.67)	\$0.18	\$1.24
EPS (GAAP)	(\$305.32)	(\$386.56)	(\$3.36)	(\$2.96)	(\$4.88)	(\$0.69)	(\$13.60)	(\$0.48)	(\$0.57)	(\$0.50)	(\$0.39)	(\$1.94)	(\$0.81)	(\$0.02)	\$0.96
W. Avg. Shares Outstanding (Diluted)	93	93	4,271	4,271	4,271	14,820	4,271	25,960	26,260	26,660	27,160	26,510	28,535	30,110	30,560

MARGIN ANALYSIS:

Total Gross Profit	NM	(707.9%)	(1113.4%)	(350.7%)	(44.4%)	(28.9%)	(111.9%)	3.7%	5.6%	16.0%	25.7%	14.4%	52.8%	63.9%	68.1%
R&D	NM	3599.4%	1836.0%	452.5%	119.1%	148.3%	231.0%	99.6%	102.1%	82.0%	60.0%	82.8%	41.2%	32.8%	26.8%
SG&A	NM	1083.6%	1287.2%	282.5%	94.2%	108.7%	164.6%	80.2%	80.8%	70.0%	54.0%	69.2%	37.6%	30.2%	24.6%
EBIT	NM	NM	(4236.6%)	(1085.7%)	(257.7%)	(285.9%)	(507.5%)	(176.2%)	(177.4%)	(136.0%)	(88.3%)	(137.7%)	(26.1%)	1.0%	16.6%
Tax Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stock-Based Comp	NM	226.3%	160.7%	32.0%	10.1%	11.6%	18.6%	12.0%	10.0%	8.0%	7.0%	8.9%	5.0%	4.5%	4.5%
Net Income (GAAP)	NM	NM	(4266.7%)	(1159.9%)	(491.6%)	(269.9%)	(614.4%)	(182.4%)	(181.5%)	(139.8%)	(91.7%)	(141.9%)	(28.0%)	(0.4%)	15.6%

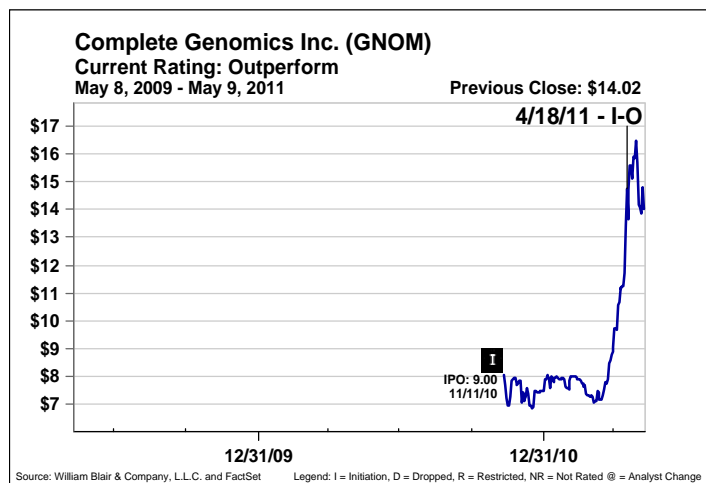
GROWTH METRICS:

Total Revenue Growth	NA	NM	NM	NM	NM	510%	1407%	1934%	652%	130%	205%	285%	129%	61%	42%
COGS	NA	NM	1151%	614%	378%	78%	295.3%	61%	58%	34%	76%	55.6%	27%	23%	25%
Gross Profit	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	95%	51%
R&D	NA	(5%)	(9%)	33%	(12%)	(11%)	(3%)	10%	70%	58%	23%	38%	14%	28%	16%
SG&A	NA	60%	151%	203%	128%	80%	129%	27%	115%	71%	51%	62%	25%	29%	16%
Operating Income	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	2358%
Net Income (excl. nonrecurr.)	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	84%	NM	NM	(5966%)
Stock Based Comp	NA	320%	212%	105%	154%	(51%)	24%	52%	135%	81%	84%	84%	29%	45%	42%
EPS (GAAP)	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	(5879%)
EPS (excl. stock-based comp)	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	580%
Diluted Shares Outstanding	NA	-	4431%	4431%	4431%	15621%	4493%	508%	515%	524%	83%	521%	8%	6%	1%

E=William Blair & Company, L.L.C. estimate

William Blair & Company, L.L.C. is a market maker in the security of Complete Genomics, Inc. and may have a long or short position.

Additional information is available upon request.



Current Rating Distribution (as of 04/30/11)

Coverage Universe	Percent	Inv. Banking Relationships*	Percent
Outperform (Buy)	58	Outperform (Buy)	8
Market Perform (Hold)	31	Market Perform (Hold)	2
Underperform (Sell)	1	Underperform (Sell)	0

*Percentage of companies in each rating category that are investment banking clients, defined as companies for which William Blair has received compensation for investment banking services within the past 12 months.

Amanda Murphy attests that 1) all of the views expressed in this research report accurately reflect his/her personal views about any and all of the securities and companies covered by this report, and 2) no part of his/her compensation was, is, or will be related, directly or indirectly, to the specific recommendations or views expressed by him/her in this report. We seek to update our research as appropriate, but various regulations may prohibit us from doing so. Other than certain periodical industry reports, the majority of reports are published at irregular intervals as deemed appropriate by the analyst.

Stock Rating: William Blair & Company, L.L.C. uses a three-point system to rate stocks. Individual ratings reflect the expected performance of the stock relative to the broader market over the next 12 months. The assessment of expected performance is a function of near-term company fundamentals, industry outlook, confidence in earnings estimates, valuation, and other factors. Outperform (O) – stock expected to outperform the broader market over the next 12 months; Market Perform (M) – stock expected to perform approximately in line with the broader market over the next 12 months; Underperform (U) – stock expected to underperform the broader market over the next 12 months; Not Rated (NR) – the stock is currently not rated.

Company Profile: The William Blair research philosophy is focused on quality growth companies. Growth companies by their nature tend to be more volatile than the overall stock market. Company profile is a fundamental assessment, over a longer-term horizon, of the business risk of the company relative to the broader William Blair universe. Factors assessed include: 1) durability and strength of franchise (management strength and track record, market leadership, distinctive capabilities); 2) financial profile (earnings growth rate/consistency, cash flow generation, return on investment, balance sheet, accounting); 3) other factors such as sector or industry conditions, economic environment, confidence in long-term growth prospects, etc. Established Growth (E) – Fundamental risk is lower relative to the broader William Blair universe; Core Growth (C) – Fundamental risk is approximately in line with the broader William Blair universe; Aggressive Growth (A) – Fundamental risk is higher relative to the broader William Blair universe.

The ratings and company profile assessments reflect the opinion of the individual analyst and are subject to change at any time.

The compensation of the research analyst is based on a variety of factors, including performance of his or her stock recommendations; contributions to all of the firm's departments, including asset management, corporate finance, institutional sales, and retail brokerage; firm profitability; and competitive factors.

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies—to our clients and our trading desks—that are contrary to opinions expressed in this research. Our asset management and trading desks may make investment decisions that are inconsistent with recommendations or views expressed in this report. We will from time to time have long or short positions in, act as principal in, and buy or sell the securities referred to in this report. Our research is disseminated primarily electronically, and in some instances in printed form. Electronic research is simultaneously available to all clients. This research is for our clients only. No part of this material may be copied or duplicated in any form by any means or redistributed without the prior written consent of William Blair & Company, L.L.C.

THIS IS NOT IN ANY SENSE A SOLICITATION OR OFFER OF THE PURCHASE OR SALE OF SECURITIES. THE FACTUAL STATEMENTS HEREIN HAVE BEEN TAKEN FROM SOURCES WE BELIEVE TO BE RELIABLE, BUT SUCH STATEMENTS ARE MADE WITHOUT ANY REPRESENTATION AS TO ACCURACY OR COMPLETENESS OR OTHERWISE. OPINIONS EXPRESSED ARE OUR OWN UNLESS OTHERWISE STATED. PRICES SHOWN ARE APPROXIMATE.

THIS MATERIAL HAS BEEN APPROVED FOR DISTRIBUTION IN THE UNITED KINGDOM BY WILLIAM BLAIR INTERNATIONAL, LIMITED, REGULATED BY THE FINANCIAL SERVICES AUTHORITY (FSA), AND IS DIRECTED ONLY AT, AND IS ONLY MADE AVAILABLE TO, PERSONS FALLING WITHIN COB 3.5 AND 3.6 OF THE FSA HANDBOOK (BEING "ELIGIBLE COUNTERPARTIES" AND "PROFESSIONAL CLIENTS"). THIS DOCUMENT IS NOT TO BE DISTRIBUTED OR PASSED ON TO ANY "RETAIL CLIENTS." NO PERSONS OTHER THAN PERSONS TO WHOM THIS DOCUMENT IS DIRECTED SHOULD RELY ON IT OR ITS CONTENTS OR USE IT AS THE BASIS TO MAKE AN INVESTMENT DECISION.

"WILLIAM BLAIR & COMPANY" AND "WILLIAM BLAIR & COMPANY (SCRIPT)" ARE REGISTERED TRADEMARKS OF WILLIAM BLAIR & COMPANY, L.L.C. Copyright 2011, William Blair & Company, L.L.C.

William Blair & Company®

CHICAGO BOSTON LONDON NEW YORK SAN FRANCISCO SHANGHAI WILMINGTON ZURICH