

YM BIOSCIENCES, INC. (NYSE AMEX: YMI)

NIMOTUZUMAB SHAPING UP TO BE A BEST-IN-CLASS CANCER THERAPY; CYTOPIA ACQUISITION INCREASES OUR ESTIMATES

YM BioSciences, Inc. (NYSE AMEX: YMI, TSX: YM) is a life-sciences product development company. YMI's principal product in development is nimotuzumab, an EGFR-targeting monoclonal antibody currently being advanced for the treatment of glioma, head and neck, gastric, cervical, and non-small-cell lung (NSCLC) cancers.

Selected nimotuzumab late stage trials by YMI or licensees:

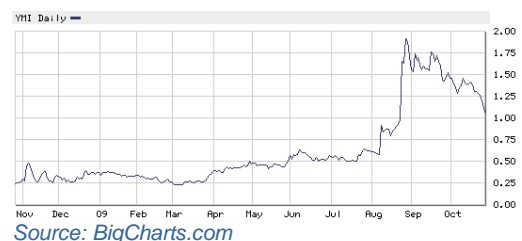
11 Phase II and Phase III trials ongoing:

- Phase III Trial (Singapore & worldwide) (National Cancer Center of Singapore): Adjuvant Head & Neck Cancer
- Phase III Trial (Western Europe) (Oncoscience AG): First-Line Pediatric Glioma
- Phase III Trial (Western Europe) (Oncoscience AG): First-Line Adult Glioma
- Phase IIb/III Trial (U.S./Canada) (YMI): Diffuse Intrinsic Pontine Glioma
- Phase II/III (Western Europe) (Oncoscience AG): Pancreatic Frontline
- Phase II Trial (Japan) (Daiichi-Sankyo): First-Line NSCLC
- Phase II Trial (Japan) (Daiichi-Sankyo/Kuhnle Pharma): Advanced/Recurrent Gastric Cancer
- Phase II Trial (Canada) (YMI): Palliative NSCLC
- Phase II Trial (Canada) (YMI): Brain Metastases from NSCLC
- Phase II Trial (Singapore) (Innogene Kalbiotech/Kalbe Farma): Cervical Cancer
- Phase II Trial (Singapore) (Innogene Kalbiotech/Kalbe Farma): Locally-Advanced Head & Neck Cancer

Share Price (10/27/09)	\$1.07
52-Week Price Low / High	\$0.20 – \$2.24
Mkt. Capitalization (issued)	\$62 MM
Shares Outstanding (issued)	58.22 MM
12-month Target Price	\$5.50
Cash & Equiv. (6/30/09)	\$36 MM
Fiscal Year Ends	June 30th
Website	ymbiosciences.com

All currency figures in USD\$, unless otherwise noted.

12-Month Price Chart



We are reiterating our BUY rating on YM BioSciences, Inc. (NYSE AMEX: YMI, TSX: YM) and increasing our 12-month price target to \$5.50 for YMI shares.

- ☐ **Globally, YMI has 11 Phase II and Phase III trials ongoing for nimotuzumab**, an EGFR-targeting monoclonal antibody with best-in-class potential in an established and marketed class of billion dollar drugs with only two other antibodies available that target EGFR (e.g., Erbitux® and Vectibix®).
- ☐ **Efficacy Strong and validating development partner in Japan (Daiichi Sankyo)** is funding clinical trials in Japan with YMI receiving a royalty on sales, milestone payments and data. The Company expects data from Daiichi's Phase II trial of nimotuzumab with chemoradiation as a first-line treatment for non-small-cell lung cancer (NSCLC) and data from Daiichi's Phase II trial of nimotuzumab in recurrent gastric cancer in 1H2010.
- ☐ **Data of Nimotuzumab's Phase II randomized trial in Head & Neck Cancer demonstrates comparable efficacy** to that of Erbitux® in high-EGFR expressing cells without the numerous severe toxicities of Erbitux®.
- ☐ **Proposed acquisition of Cytopia Ltd. (ASX: CYT) brings promising clinical stage portfolio to YMI at a favorable valuation.**
- ☐ **Solid balance sheet with approximately USD\$36 million in cash & equivalents as of June 30, 2009 provide ample resources to support further development of key programs.**

CHRYSTYNA BEDRIJ 212-509-9500 CBEDRIJ@GRIFFINSECURITIES.COM	KEITH A. MARKEY, PH.D. 212-514-7914 KMARKEY@GRIFFINSECURITIES.COM	MARK MERRILL 646-442-1441 MMERRILL@GRIFFINSECURITIES.COM
--	--	---

HIGHLIGHTS

- ❑ **NIMOTUZUMAB, A POTENTIAL “BEST-IN-CLASS” EGFR-TARGETING DRUG, ADVANCING IN 11 PHASE II AND PHASE III TRIALS.** Nimotuzumab requires bivalent binding (requiring both “arms” of the molecule to link with EGFR receptors) for efficient attachment to EGFR on the cellular surface. The strength of this binding is described as avidity, which is approximately affinity (monovalent binding) squared. Nimotuzumab is thus an affinity-optimized antibody that, by virtue of its lower affinity than the marketed EGFR mAbs, avoids normal tissue, and is clinically effective in those areas where there is a moderate-to-high expression of EGF receptor. As demonstrated by YMI, this occurs naturally in high-expressing tumor cells, such as in head and neck, glioma, cervical, and gastric cancers, and also in indications where any radiation-containing treatment is utilized (e.g., NSCLC). Nimotuzumab has completed 20 clinical trials around the world, and, notably, nimotuzumab is already approved for sale in India, China, Indonesia, the Philippines and 19 other developing countries. Importantly, the drug is in later stage clinical trials in major global markets with YMI’s licensees, which include **Daiichi-Sankyo** in Japan, **Oncoscience AG** in Western Europe, **Kuhnil Pharma Co.** in Korea, and **Innogene Kalbiotech/Kalbe Farma** in Singapore. Each licensee is funding clinical trials in their respective regional markets, and YMI is entitled to the data, milestone payments, and a royalty on revenue upon commercialization. There are another 32 clinical trials ongoing worldwide in various solid tumors.¹ The Company has also already commenced discussions with the FDA for permission to include U.S. patients in its current palliative lung cancer and brain metastases from lung cancer trials.
- ❑ **PROPOSED ACQUISITION OF CYTOPIA LTD BRINGS TWO NOVEL ONCOLOGY CANDIDATES INTO YMI’S PIPELINE.** The proposed all-stock acquisition of Cytopia, announced on Oct. 5, 2009, adds CYT997, a small molecule vascular disrupting agent (VDA), and CYT387, a JAK1/2 inhibitor, to YMI’s pipeline for approximately \$9 million.² CYT997 is in an intravenous (IV) Phase II for brain cancer. However, it is CYT997’s oral formulation that fuels our enthusiasm. We also expect this novel VDA to potentially be combined with Avastin® therapy to treat a wider range of cancers. CYT387 is a Phase I-ready JAK2/JAK1 kinase inhibitor for myeloproliferative disorders (MPDs), such as myelofibrosis, that provide a potentially straightforward FDA pathway for this important unmet medical need. YMI will retain Cytopia’s Australian operations, including Cytopia’s six employees who are responsible for the VDA and JAK2 programs. YMI anticipates that the addition of these programs will increase the overall cash burn by \$1 million in fiscal 2010 and \$3 million in fiscal 2011. Overall, the proposed acquisition expands YMI’s oncology pipeline with two compelling candidates at a favorable valuation for YMI shareholders.
- ❑ **CYT997 OFFERS POTENTIAL ORAL DOSING ADVANTAGE AND SYNERGY WITH AVASTIN.** CYT997’s mechanism of action is shared by Antisoma’s ASA404 and several other clinical agents, but CYT997 offers the potential advantage of oral administration, providing the prospect for important clinical advantage over IV, as well as convenience to patients over intravenously administered drugs. Vascular disrupting agents, such as CYT997, may also be combined with Avastin therapy to treat a broad range of cancers. VDAs work by targeting and destroying existing tumor blood vessels. This activity differs from Avastin®, which inhibits the formation of new blood vessels. CYT997 is currently in a Phase II trial in glioblastoma multiforme and a Phase II trial in multiple myeloma. Results are anticipated from the glioblastoma Phase II in mid-2010. A Phase II combination trial is anticipated to begin in 1H 2011.
- ❑ **CYT387: PHASE I-READY JAK2/3 INHIBITOR IN AREA OF CLEAR UNMET MEDICAL NEED.** CYT387, a JAK1/2 inhibitor, is also an orally-active molecule. A Phase I trial with Dr. Ayalew Tefferi of the Mayo Clinic as principal investigator is expected to begin in Q4 CY2009 in myeloproliferative disorders (MPDs), an important unmet medical need. The regulatory pathway in MPDs is well defined, providing a straightforward clinical development program if CYT387 proves to be effective.

¹ YM Biosciences, Inc. website: “Consortium” <http://www.ymbiosciences.com/products/nimotuzumab/codevelopment.php>. 2009.

² YM Biosciences Inc. press release, “YM Biosciences Announces Offer for Cytopia LTD, an Australian Cancer-Focused Development Company.” October 5, 2009.

- **CYTOPIA ACQUISITION INCREASES OUR 12-MONTH PRICE TARGET TO \$5.50 FOR YMI SHARES.** Our price target for YMI shares increases to \$5.50 based on our DCF valuation model. We project sales of CYT997 in glioblastoma multiforme and sales of CYT387 in MPDs and adjust our diluted shares outstanding by the estimated 7.2 million shares issued to acquire Cytopia. Given the market potential of both pipeline candidates and the minimal impact on the overall near-term burn rate (\$1 million in 2010 and \$3 million in 2011), the Cytopia acquisition offers an appropriate broadening of YMI's pipeline and an additional upside to YMI's share price prospects.

(Intentionally left blank)

TABLE OF CONTENTS

HIGHLIGHTS	2
TABLE OF CONTENTS	3
BUSINESS DESCRIPTION	5
KEY EVENTS AND MILESTONES	5
NIMOTUZUMAB	6
BIVALENT BINDING MECHANISM	8
PHASE II COLORECTAL CANCER TRIAL SUPPORTS BIVALENCY.....	11
NIMOTUZUMAB EQUIVALENT EFFICACY TO CETUXIMAB.....	12
PREVIOUS CLINICAL RESULTS	12
AEROLEF™	13
ABOUT CYTOPIA	13
ABOUT CYT997	13
ABOUT CYT387	13
INVESTMENT CONCERNS AND RISKS	14
FINANCIAL FORECASTS & VALUATION.....	15
HISTORICAL BALANCE SHEET	15
REVENUE ASSUMPTIONS	16
LICENSING & MILESTONES	16
DRUG SALES	16
INCOME STATEMENT	22
DISCOUNTED CASH FLOW (DCF) MODEL.....	23
DISCLOSURES	24

BUSINESS DESCRIPTION

YM BioSciences, Inc. (NYSE AMEX: YMI, TSX: YM) is a life-sciences product development company. YMI's principal product in development is nimotuzumab, an EGFR-targeting monoclonal antibody currently being advanced for the treatment of gliomas, head and neck, gastric, cervical, and non-small-cell lung (NSCLC) cancers, including the following 11 Phase II and Phase III nimotuzumab trials ongoing by YMI or licensees:

- Phase III Trial (Singapore & worldwide) (National Cancer Center of Singapore): Adjuvant Head & Neck Cancer
- Phase III Trial (Western Europe) (Oncoscience AG): First-Line Pediatric Glioma
- Phase III Trial (Western Europe) (Oncoscience AG): First-Line Adult Glioma
- Phase IIb/III Trial (U.S./Canada) (YMI): Diffuse Intrinsic Pontine Glioma
- Phase II/III (Western Europe) (Oncoscience AG): Pancreatic Frontline
- Phase II Trial (Japan) (Daiichi-Sankyo): First-Line NSCLC
- Phase II Trial (Japan) (Daiichi-Sankyo/Kuhnii Pharma): Advanced/Recurrent Gastric Cancer
- Phase II Trial (Canada) (YMI): Palliative NSCLC
- Phase II Trial (Canada) (YMI): Brain Metastases from NSCLC
- Phase II Trial (Singapore) (Innogene Kalbiotech/Kalbe Farma): Cervical Cancer
- Phase II Trial (Singapore) (Innogene Kalbiotech/Kalbe Farma): Locally-Advanced Head & Neck Cancer

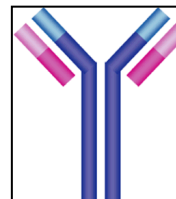
KEY EVENTS AND MILESTONES (CALENDAR YEAR)

- ❑ **Q4 2009** – Oral presentation at the American Society for Therapeutic Radiation and Oncology (ASTRO) (Nov. 2, 2009) randomized data updating overall survival in Phase II squamous cell cancer of the head and neck (SCCHN) trial.
- ❑ **Q1 2010** – Close Cytopia Ltd. acquisition.
- ❑ **1H 2010** – Release data from Europe (Oncoscience) Phase III trial of nimotuzumab as a first-line treatment for pediatric glioma.
- ❑ **1H 2010** – Release data from Europe (Oncoscience) Phase III trial of nimotuzumab as a first-line treatment for adult glioma.
- ❑ **1H 2010** – Release data from Japan (Daiichi-Sankyo) Phase II trial of nimotuzumab with chemoradiation as a first-line treatment for non-small-cell lung cancer (NSCLC).
- ❑ **1H 2010** – Release data from Japan (Daiichi-Sankyo) Phase II trial of nimotuzumab in recurrent gastric cancer.
- ❑ **Q3 2010** – Possible initiation of Phase III clinical trials in Japan in NSCLC and/or gastric cancer.
- ❑ **2H 2010** – Completion of recruitment for two double-blinded randomized Phase II trials in palliative NSCLC and brain metastases from NSCLC.
- ❑ **2H 2010** – Release data from Phase I safety trial of CYT387 in myeloproliferative disorders (MPDs) (Dr. Ayalew Tefferi of Mayo Clinic is the principal investigator).
- ❑ **1H 2011** – Expect initiation of randomized Phase II trial of oral CYT997 in solid tumors.

NIMOTUZUMAB

Nimotuzumab is YMI's humanized monoclonal antibody (mAb) targeting the epidermal growth factor receptor (EGFR) currently being studied in pediatric and adult gliomas, non-small cell lung (NSCLC), gastric, cervical cancers, and various other solid tumors. Importantly, nimotuzumab has demonstrated activity in numerous clinical trials in over 10 indications without the presence of the severe side effects, including follicular (skin) rash associated with other EGFR receptor-targeting agents, such as cetuximab (Erbix®), panitumumab (Vectibix®), and erlotinib (Tarceva®). YMI's license to nimotuzumab includes most of the major world markets, including the U.S. and Canada, Europe, Japan, and the Pacific Rim countries, excluding the People's Republic of China. In addition to YMI's extensive global consortium of licensees working to develop and commercialize nimotuzumab, CIMAB, the licensor, has numerous other licensees in emerging pharmaceutical markets. The table below lists several of YMI's leading regional licensees:

Basic mAb Structure



Source: UNM.edu

Major Partner	Region
Daiichi-Sankyo	Japan
Oncoscience AG	Western Europe
Kuhnle Pharma Co.	Korea
Innogene Kalbiotech/Kalbe Farma	Singapore

Source: YM Bioscience, Inc.

Nimotuzumab is already approved for sale in India, China, Indonesia, the Philippines and 19 other developing countries.³ The following is a list of some of the countries in which nimotuzumab is approved and the indication(s) of approval:

(Intentionally left blank)

³ YM Biosciences, Inc. website: "Consortium" <http://www.ymbiosciences.com/products/nimotuzumab/codevelopment.php>. 2009.

Nimotuzumab Global Registration

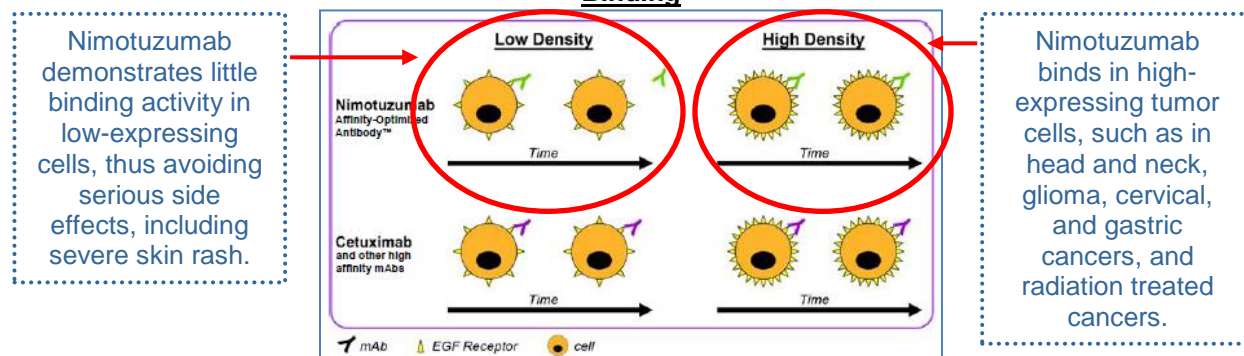
Country	Date of Approval	Year	Indication	Company	Tradename	Launched
Mexico	01.09.09	2009	SCCHN, refractory children glioma and adult glioma	Laboratorios PiSA	Vecthix	
Nepal	20.08.2009	2009	SCCHN	Biocon	BioMab	
Bhutan	04.08.2009	2009	SCCHN	Biocon	BioMab	
Venezuela	30.07.2009	2009	SCCHN	Norville	CIMAher	
Algeria	19.07.2009	2009	SCCHN	El Kendi	CIMAher	
Viet Nam	19.05.2009	2009	SCCHN	Almedic	CIMAher	
Brazil	10.03.2009	2009	Refractory children glioma	Eurofarma	CIMAher	
Cambodia	12.01.2009	2009	SCCHN	Innogene Kalbiotech	TheraCIM	
Mauritania	27.11.2008	2008	SCCHN	Genpharma	CIMAher	
Indonesia	12.11.2008	2008	refractory children glioma and adult glioma	Innogene Kalbiotech	TheraCIM	Y
Sri Lanka	4.09.2008	2008	SCCHN	BBPL	BioMab	
Philippines	7.08.2008	2008	SCCHN, refractory children glioma and adult glioma	Innogene Kalbiotech	TheraCIM	Y
Paraguay	18.07.2008	2008	SCCHN	Libra	CIMAher	
Guinea Conakry	4.06.2008	2008	SCCHN	Genpharma	CIMAher	
Gabon	30.11.2007	2007	SCCHN	Genpharma	CIMAher	
Ivory Coast	23.10.2007	2008	SCCHN	Genpharma	CIMAher	
Cuba	8.10.2007	2007	refractory children glioma and adult glioma	CIMAB	CIMAher	Y
Ukraine	28.09.2007	2007	SCCHN, refractory children glioma and adult glioma	OSAG	Theraloc	
Peru	9.07.2007	2007	SCCHN	ESKE Group	CIMAher	
India	28.06.2006	2006	SCCHN	BBPL	BioMab	Y
Argentina	18.05.2006	2006	SCCHN and glioma	Lab. ELEA	CIMAher	Y
China	09.04.2005	2005	Nasopharyngeal carcinoma	BPL	CIMAher	Y
Colombia	04.04.2005	2005	SCCHN	Lab. Delta	CIMAher	Y
Cuba	19.02.2002	2002	SCCHN	CIMAB	CIMAher	Y

Source: YM BioSciences, Inc.

BIVALENT BINDING MECHANISM

On April 20, 2009, YMI presented a poster at the 100th AACR annual meeting entitled, “Binding properties of the anti-EGFR monoclonal antibody nimotuzumab limit its interaction with the EGFR in renal and epidermal cells.”^{4,5} Importantly, the results of the study demonstrated that nimotuzumab has a unique mechanistic difference compared to cetuximab and panitumumab that allows it to achieve statistically equivalent anti-tumor activity without causing serious side effects, including follicular (skin-related) rash. Nimotuzumab requires bivalent binding (requiring both “arms” of the molecule to link with EGF receptors) for efficient attachment to EGFR on the cellular surface. The strength of this binding is described as avidity, which is approximately affinity (monovalent binding) squared. Since nimotuzumab requires both “arms” of the molecule to attach to create a stable bond, it primarily binds in environments with high EGFR density, such as tumors, where EGF receptors are in close enough proximity for each arm to reach a different receptor. Conversely, cetuximab and panitumumab bind in both low and high EGFR density environments indiscriminately. Trastuzumab (Herceptin®), a well-known monoclonal antibody that targets the HER2 receptor approved to treat breast cancer, also depends on bivalent binding.⁶ Nimotuzumab’s avidity (bivalent binding) is illustrated in the diagram:

Nimotuzumab: Attaches to EGF Receptors in High Expressing Tumor Cells through Bivalent Binding



Source: YM Biosciences, Inc., Griffin Securities, Inc.

EGF receptors have many important biological functions and are expressed on the surface of healthy cells.⁷ EGF receptors are amplified on cells in certain cancers and also in response to certain therapies – particularly radiation. Because the activity of nimotuzumab is necessarily concentrated in tumors that overexpress EGFR, it is a specifically active anti-cancer drug with a much improved safety profile over previous generations of higher affinity antibodies. Similar to higher affinity antibodies, nimotuzumab binds to EGF receptors with both antibody arms, thus blocking receptor activation and cancer cell growth in high EGFR density environments. In contrast to cancer cells, normal cells have low numbers of EGF receptors; therefore, nimotuzumab demonstrates transient binding activity, which causes it to avoid serious side effects, including severe skin rash. However, single arm binding affinity of higher affinity antibodies, including cetuximab and panitumumab, also occurs in low EGF density environments which if dosed for an extended period of time, can cause toxicity which can be severe. These higher affinity antibodies are unable by virtue of their higher affinity to discriminate between diseased and healthy cells.

High EGFR-Expressing Cancers
Head & Neck Cancer
Glioma
Cervical Cancer
Gastric Cancer
Non-Small-Cell Lung Cancer

Source: Griffin Securities, Inc.

Thus, by binding indiscriminately, cetuximab and panitumumab cause a range of side effects, including skin rash, which can be very serious. As shown in the following table, certain side effects attributed to

⁴ YM Biosciences Inc. press release, “YM Biosciences Announces Nimotuzumab Presentations to be made at the 100th Annual Meeting of the American Association for Cancer Research and European Society for Medical Oncology.” March 13, 2009.

⁵ Garrido G, et al. Binding properties of the anti-EGFR monoclonal antibody, nimotuzumab, limit interaction with the EGFR in renal and epidermal cells. American Association for Cancer Research (AACR) 100th Annual Meeting, 2009

⁶ Steffen, A, et al. In Vitro Characterization of a Bivalent Anti-HER-2 Affibody with Potential for Radionuclide-Based Diagnostics. *Cancer Biotherapy and Radiopharmaceuticals* 2005; 20(3): 239-248.

⁷ Herbst, RS. Review of epidermal growth factor receptor biology. *Int J Radiat Oncol Biol Phys* 2004; 59(2 Suppl): 21-6.

EGFR inhibitors, such as Grades III & IV skin rash are high with Erbitux® and Vectibix® and very rare (“VR”) with nimotuzumab. This result was confirmed in the *Journal of Clinical Oncology*.⁸

Treatment-Related Side Effects of HER1/EGFR Inhibition				
	Erbitux™ plus Radiation (n=208)	Nimotuzumab plus Radiation (n=54)	Vectibix™ plus BSC (n=229)	BSC Alone (n=234)
Rash (All Grades)	87%	6%	90%	9%
Antibody Related (Acneiform)	14%	(All types)		
Rash (Grades 3 & 4)	14%	VR	14%	0%
Hypomagnesemia - Total	50%	VR	39%	2%
Nail	--	VR	29%	0%
Nausea	49%	56%	23%	16%
Diarrhea	19%	9%	21%	11%
Constipation	35%	4%	--	--
Vomiting	29%	15%	19%	12%
Eye	--	VR	15%	2%

Source: YM BioSciences, Inc.

Some of the cutaneous (skin-related) side effects caused by these agents are very distressing, partly because they are chronic due to the long duration of treatment. Therefore, patients need early and appropriate dermatological management.⁹ A 2007 study published in the *Radiotherapy and Oncology* found that 28% of patients treated with cetuximab and radiation therapy developed grade IV skin rash.¹⁰ A second 2007 study published in the *International Journal of Biological Markers* found that 90% of patients developed grade III or IV skin rash while being treated with cetuximab, radiation therapy and chemotherapy.¹¹ For reference, the photograph below shows a patient with a grade IV skin rash caused by cetuximab.

Grade IV Skin Rash Caused by Cetuximab Therapy¹²



Source: Lord et al. *Journal of Clinical Oncology*. 2007.

In order to validate the proposed bivalent binding mechanism of nimotuzumab, YMI completed several studies. The first study compared the binding affinity of nimotuzumab, cetuximab, and panitumumab in high and low EGFR expression environments *in vitro* and demonstrated that cetuximab and panitumumab bind in the presence of low as well as high EGFR-expressing cells, while nimotuzumab only demonstrates activity in high EGFR expression locations.¹³ This result is presented in the graphs that follow. The green line is nimotuzumab, the grey line is cetuximab, and the purple line is panitumumab.

⁸ (JCO), Vol 22, No. 9, May 1, 2004. In clinical trials, potentially fatal infusion reactions were reported. Grade 1 and 2 infusion reactions, including chills, fever, and dyspnea usually occurring on the first day of initial dosing, were observed in 16% of patients receiving Erbitux plus irinotecan and 23% of patients receiving Erbitux monotherapy. Severe infusion reactions occurred with the administration of Erbitux in approximately 3% (17/633) of patients. Acneiform rash was reported in 88% (560/633) of all treated patients and was severe (Grade 3 or 4) in 12% (79/633). Subsequent to the development of severe dermatologic toxicities, complications including S. aureus sepsis and abscesses requiring incision and drainage were reported. Product Monogram, Erbitux, February 2004.

⁹ Lancet Oncology 2005; 6: 491–500; Cutaneous side effects of kinase inhibitors and blocking antibodies; Codex, France.

¹⁰ Giro, C. et al. High rate of severe radiation dermatitis during radiation therapy with concurrent cetuximab in head and neck cancer: Results of a survey in EORTC institutes. *Radiotherapy and Oncology* 2008; 90: 166-171.

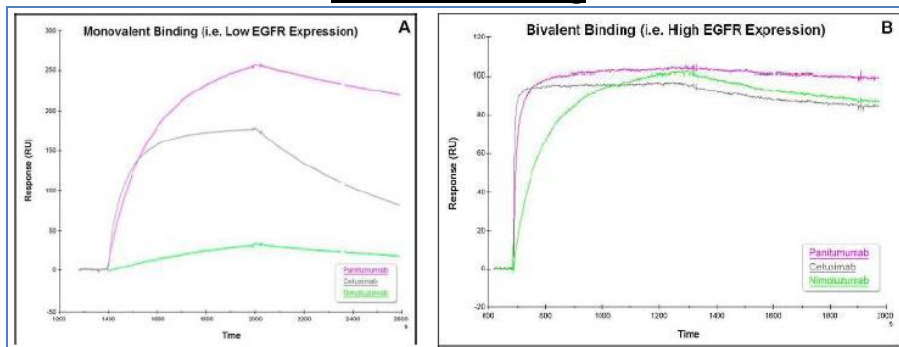
¹¹ Monti, M. and S. Motta. Clinical management of cutaneous toxicity of anti-EGFR agents. *Int J Biol Markers* 2007; 22: 53-61.

¹² Lord, HK et al. Cetuximab is Effective, but more Toxic than Reported in the Bonner Trial *J Clin Oncology* 2007.

¹³ Garrido G, et al. Binding properties of the anti-EGFR monoclonal antibody, nimotuzumab, limit interaction with the EGFR in renal and epidermal cells. American Association for Cancer Research (AACR) 100th Annual Meeting, 2009

The first graph (“A”) illustrates the binding response over time in a low EGFR expression environment. Nimotuzumab demonstrates very little binding activity, while panitumumab and cetuximab illicit a high signal and definitive binding activity. In the high EGFR environment, depicted in the second graph (“B”), all three antibodies display equivalent signals indicating binding activity.

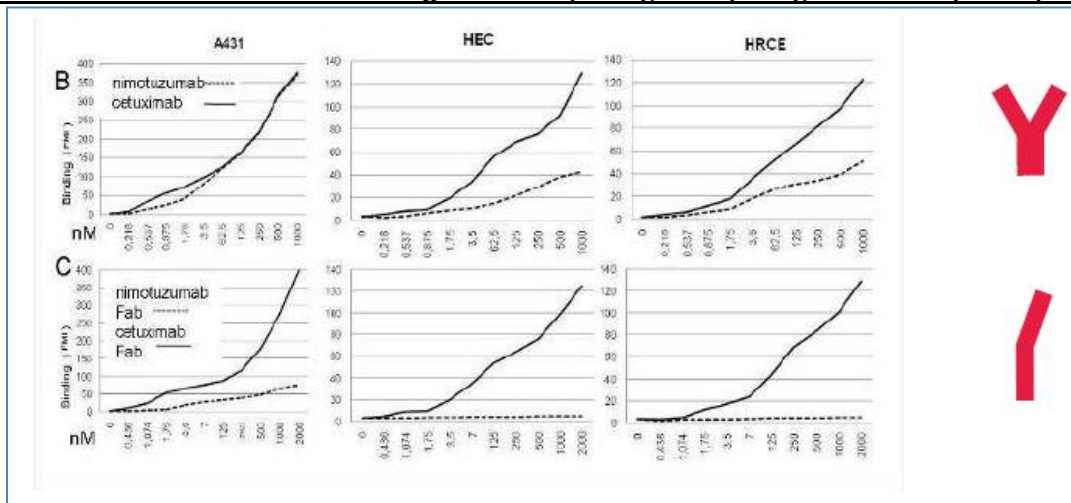
Mechanistic Differences of Nimotuzumab, Cetuximab, and Panitumumab: Bivalent Versus Monovalent Binding



Source: YM Biosciences, Inc., Garrido et al. 2009

To prove that other monoclonal antibodies bind with only one arm – confirming monovalent binding affinity – a whole antibody and a fragment with only one arm were administered to human cells. If an antibody can bind having only one arm, it should establish the concept. As predicted from the experimental data above, nimotuzumab showed the same degree of binding activity in the tumor cell model (A431) as cetuximab when introduced as a complete molecule. In skin and renal cells (HEC and HRCE, respectively), nimotuzumab showed 60% less binding affinity than cetuximab. This is important because cetuximab’s tendency to bind to EGFR in non-tumor containing cells is the reason for the severe side effects. In the bottom row of graphs, nimotuzumab showed very little binding activity when employed as a Fab (i.e. when the ability to form bivalent bonds was removed). Notably, cetuximab’s binding affinity remained the same in all scenarios, including in the non-tumor skin and renal cells. Because nimotuzumab only binds in areas that contain high EGFR density, it preferentially targets tumors and avoids binding to skin cells and other low EGFR density areas. This targeted activity allows it to act with the same efficacy as cetuximab but without the serious side effect profile and makes it unique in targeting tumor while avoiding normal tissue.

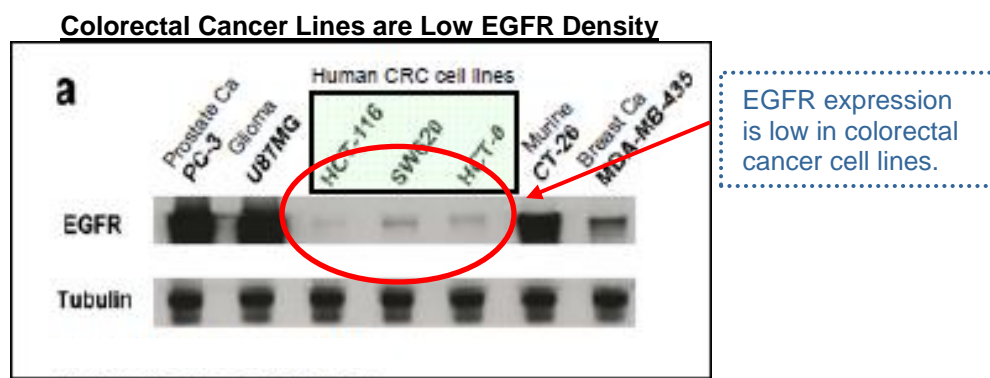
Monovalent Versus Bivalent Binding in Tumor (A431), Skin (HEC), and Renal (HRCE) Cells



Source: YM Biosciences, Inc., Tikhomirov I et al. 2009

PHASE II COLORECTAL CANCER TRIAL SUPPORTS BIVALENCY

In August 2008, YM BioSciences presented data from a Phase II clinical trial in metastatic colorectal cancer (mCRC).¹⁴ At the time, the bivalency of nimotuzumab had not been considered, so it was the belief of the Company that in order to successfully bring an EGFR-targeting antibody to market, they would have to replicate ImClone’s BOND 1 study results of cetuximab in colorectal cancer, an indication believed to be promising for EGFR inhibitors. In fact, because of nimotuzumab’s propensity to bivalent binding affinity, colorectal cancer is one of the least amenable indications to target (e.g., low-expressing tumor cell tumors are not targets for nimotuzumab) and refractory colon cancer would be less favorable because the initial treatment of the primary tumor with irinotecan and the effect that drug has in targeting high-EGFR cells. Numerous colorectal cancer cells have, in any event, low-EGFR density. As demonstrated above, nimotuzumab targets high EGFR density areas; it does not bind definitively to low EGFR density cells, which would include lower-expressing colorectal tumor cells. The image below shows EGFR expression in various cancer cell lines. From the left of the diagram, prostate cancer and glioma display very high levels of EGFR expression. Colorectal cancer, shown in the middle three cell lines, has very little EGFR expression. Mouse and breast cancer cell lines, the last two displayed below, have higher EGFR expression.



Source: YM BioSciences, Inc.

Because nimotuzumab does not bind definitively in low EGFR-expression environments, the efficacy of nimotuzumab in the Phase II trial was approximately ¼ that of cetuximab’s response rate, a result that would be entirely predictable from the monovalent versus bivalent binding data depicted on the previous page where nimotuzumab showed the same degree of binding to tumor cells vis-à-vis cetuximab but approximately 60% less binding in healthy tissue cells (e.g., skin and renal cells, minimizing attachment in low EGFR density areas. With hindsight, the mCRC trial results support the finding of nimotuzumab’s unique bivalent mechanistic property because mCRC patients generally express low EGFR levels. In fact, in the Bond 1 mCRC trial with cetuximab, only 28% (94 out of 329) of the patients expressed high (>40%) EGFR levels, while the other 72% of patients expressed low EGFR levels (<40%). This is illustrated below:

Distribution of EGFR Expression Levels in mCRC Patients

IHC EGFR expression from mCRC trial with Cetuximab (Bond 1)*		
% Total	n	
100%	329	
72%	235	<40% positive for EGFR
28%	94	>40% positive for EGFR

*Adapted from Cunningham et al, 351:337-345 NEJM 2004

Source: YM BioSciences, Inc.

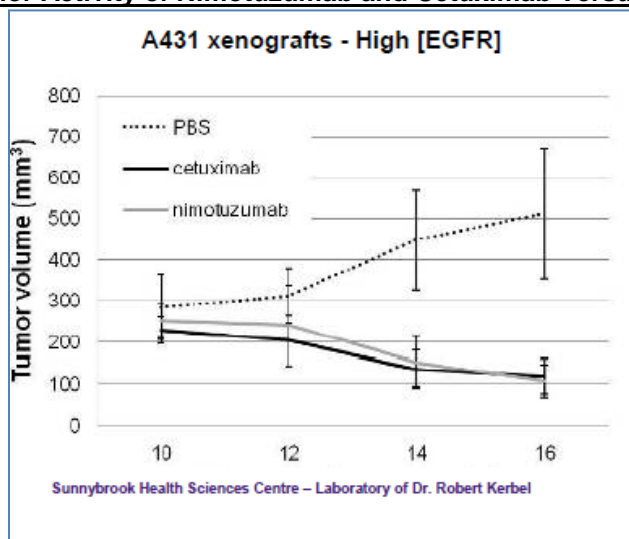
¹⁴ YM Biosciences Inc. press release, “YM Biosciences Reports Phase II Data for Nimotuzumab in Metastatic Colorectal Cancer.” August 4, 2008.

NIMOTUZUMAB EQUIVALENT EFFICACY TO CETUXIMAB, BETTER TOX

Efficacy data from nimotuzumab's randomized Phase IIb trial in Head & Neck cancer was recently presented at ASCO. The randomized Phase IIb ("BEST") clinical trial demonstrated that the efficacy of nimotuzumab compares favorably to results reported for Erbitux® and showed a statistically significant difference in overall survival ($p=0.0018$) between the arms. Significantly, this randomized trial supports the mechanism data that demonstrates that patients showed essentially equivalent clinical benefit from nimotuzumab in high-EGFR expressing cells (SCCHN >80%) without the numerous severe toxicities of Erbitux®.¹⁵

The chart below shows that nimotuzumab's activity against high EGFR density tumors compared to cetuximab.¹⁶

Anti-Tumor Activity of Nimotuzumab and Cetuximab Versus Placebo



Source: YM Biosciences, Inc., Garrido et al. 2009

PREVIOUS CLINICAL RESULTS

In previous clinical trials in head and neck cancer and glioma, nimotuzumab has been shown to importantly improve the therapeutic effects of radiation.¹⁷

YMI announced preliminary results of a Phase II clinical trial of nimotuzumab in combination with radiation therapy in NSCLC patients with unresectable brain metastases and a Phase II clinical trial of nimotuzumab in combination with radiation therapy in patients with high grade glioma in November 2008. In the first trial, disease control rate (DCR = Complete Response + Partial Response + Stable Disease) was 91.6% in the nimotuzumab plus radiation arm and 44.4% in the radiation-only arm. Notably, patients in the combination arm had a median survival of 7.00 months, compared to 2.47 months in the control arm. This difference was statistically significant ($p=0.0039$). In the second trial, the median survival time was 16.43 months in the nimotuzumab arm, compared to 10.49 months in the placebo arm. Importantly, both trials demonstrated meaningful clinical responses when administered concurrently with radiation therapy.¹⁸

¹⁵ Reddy BK, et al. A phase IIb 4-arm open-label randomized study to assess the safety and efficacy of h-R3 monoclonal antibody against EGFR in combination with chemoradiation therapy or radiation therapy in patients with advanced (stage III or IVA) inoperable head and neck cancer. American Society of Clinical Oncology (ASCO) Annual Meeting, 2009 (abstr 6041)

¹⁶ Garrido G, et al. Binding properties of the anti-EGFR monoclonal antibody, nimotuzumab, limit interaction with the EGFR in renal and epidermal cells. American Association for Cancer Research (AACR) 100th Annual Meeting, 2009

¹⁷ A report on one of these trials was published in the Journal of Clinical Oncology (Volume 22, No. 9, May 1, 2004).

¹⁸ YM Biosciences Inc. press release, "YM Biosciences Reports Data from Exploratory Clinical Trials of Nimotuzumab in Brain Metastases and High-Grade Glioma Presented at 2008 EORTC-NCI-AACR Annual Meeting." November 3, 2008.

AEROLEF™

AeroLEF™ (aerosolized free and liposome-encapsulated combination of fentanyl for inhalation) is a product based on YMI's ROSE-DS technology from DELEX Therapeutics Inc., a biotechnology firm acquired by YMI in 2005. The product is a unique formulation of fentanyl and was successfully tested in numerous trials including a randomized Phase II trial. Fentanyl is a well-validated, synthetic narcotic originally developed for intravenous administration in the hospital setting 30 years ago. Since then, the benefits of fentanyl have been extended to outpatient use via other drug delivery systems, including oral, intranasal, transmucosal, and transdermal.

In the hospital setting, AeroLEF is administered as a soft mist by means of jet nebulization, which involves the use of an FDA-approved disposable nebulizer attached to a compressed air or oxygen source. Inhalation is via a handheld mouthpiece and can take from 5 to 20 minutes, depending on the analgesia needs of the patient. In the outpatient setting, the patient is expected to use one of a number of currently available electronic nebulization devices that provide a similar dosing period.

In June 2008, YMI announced that the FDA lifted a Clinical Hold on the development of AeroLEF allowing it to continue Phase II clinical trials in the U.S.¹⁹ In addition, YMI has been advised that the product is Phase III-ready in other jurisdictions. We believe YMI will likely seek to monetize AeroLEF; thus we have excluded revenue estimates from our model at this time. We believe strategic activities to maximize value realization, including partnerships and collaborations, are underway and represent upside to the valuation.

ABOUT CYTOPIA

Cytosia Ltd. (ASX: CYT) is an Australia-based company that was founded in 1997 around the discovery of the Janus kinase (JAK) kinase family by Andrew Wilkes. Cytosia is a life sciences company that discovers and develops small molecule therapeutics for the treatment of cancer and other diseases. Cytosia's lead programs are CYT997, a vascular disrupting agent currently in Phase II trials for the treatment of glioblastoma multiforme and multiple myeloma, and CYT387, a JAK1/2 inhibitor about to enter a Phase I trial for the treatment of myeloproliferative disorders, which are potentially deadly diseases of blood cell production. Notably, Cytosia synthesizes all of its small molecules in-house; thus, YMI would gain full rights to any of Cytosia's therapeutic candidates through the proposed acquisition.

ABOUT CYT997

Cytosia's lead candidate, CYT997, is a novel small molecule vascular disrupting agent (VDA) that is in Phase II clinical trials for glioblastoma multiforme and multiple myeloma. VDAs work by disrupting blood vessels at tumor sites. Unlike Avastin® that targets new blood vessel formation, CYT997 targets existing blood vessels making this drug prospectively complementary to Avastin®. CYT997 destroys tumor vasculature by disrupting the endothelial cells that form the blood vessels. The rights to the potential first-in-class VDA, Antisoma's (LSE: ASM) ASA404, were acquired by Novartis (NYSE: NVG) through a transaction potentially \$850 million, including milestone payments and royalties on future product sales. CYT997 has the potential to be differentiated from other VDAs because it may be administered orally as well as intravenously. Oral administration of CYT997 would highly differentiate the product from other intravenous-only products in development.

ABOUT CYT387

CYT387, a JAK1/2 inhibitor, is also an orally-active molecule. A Phase I trial with Dr. Ayalew Tefferi of the Mayo Clinic as principal investigator is expected to begin in Q4 CY2009 in myeloproliferative disorders (MPDs), an important unmet medical need. The regulatory pathway in MPDs is well defined, providing a straightforward clinical development program if CYT387 proves to be effective.

¹⁹ YM Biosciences Inc. press release, "YM Biosciences Announces FDA Lifts Clinical Hold on AeroLEF® and Clearance of a Phase II Clinical Trial." June 19, 2008.

INVESTMENT CONCERNS AND RISKS

For a complete description of risks and uncertainties related to YM BioSciences, Inc.'s business, see the "Risk Factors" section in YM BioSciences' SEC filings, which can be accessed directly from the SEC Edgar filings at www.sec.gov. Potential risks include:

- ❑ **Stock risk and market risk:** There is a limited trading market for the Company's common stock. There can be no assurance that an active and liquid trading market will develop or, if developed, that it will be sustained, which could limit one's ability to buy or sell the Company's common stock at a desired price. Investors should also consider technical risks common to many small-cap or micro-cap stock investments, such as small float, risk of dilution, dependence upon key personnel, and the strength of competitors that may be larger and better capitalized.
- ❑ **New and rapidly changing field:** The pharmaceutical and biotechnological markets are rapidly evolving, and research and development are expected to continue at an accelerated pace with increased frequency. Other companies are also actively engaged in the development of therapies to directly or indirectly treat those disorders being pursued by YM BioSciences. These companies may have substantially greater research and development capabilities, as well as significantly greater marketing, financial, and human resources abilities than YM BioSciences.
- ❑ **Products still in development phases:** Although the Company intends to continue with clinical development of nimotuzumab for the treatment of pediatric and adult glioma, non-small cell lung (NSCLC), gastric, cervical cancers, and various other solid tumors, AeroLEF™ for break through pain, and other future pipeline candidates in various indications, the successful development of the Company's product candidates is uncertain. Product development costs and timelines can vary significantly for each product candidate and are difficult to accurately predict. In addition, products in development that appear to be promising may not reach commercialization for various reasons, including failure to achieve regulatory approvals, safety concerns, and/or the inability to be manufactured at a reasonable cost.
- ❑ **Funding requirements:** It is difficult to predict the Company's future capital requirements. The Company may need additional financing to continue funding the research and development of its products and to expand its business. There is no guarantee that it can secure the desired future capital or, if sufficient capital is secured, that current shareholders will not suffer significant dilution.
- ❑ **Regulatory risk:** Various statutes and regulations also govern or influence the manufacturing, safety, labeling, storage, record keeping and marketing of each product. The lengthy process of seeking approval and the subsequent compliance with applicable statutes and regulations require the expenditure of substantial resources. Any failure by us to obtain, or any delay in obtaining, regulatory approvals could materially adversely affect YM BioSciences' business. There is no guarantee that YM Biosciences' products will be approved by the U.S. Food and Drug Administration (FDA) or international regulatory bodies for marketing in the U.S. or abroad.
- ❑ **The Company may need to raise additional capital, which may not be available on terms acceptable to them, if at all:** As the Company continues to expand their research and development and sales and marketing activities, they may need to raise additional capital, which may not be available on terms acceptable to them, if at all. If the Company cannot raise necessary additional capital on acceptable terms, they may not be able to increase sales, develop or enhance their products and services, take advantage of future opportunities, or respond to competitive pressures or unanticipated requirements, any of which could cause their business to suffer.
- ❑ **Competitive risk:** The biotechnology industry is extremely competitive, mainly due to its large market potential. Many companies are developing products for the same therapeutic indications targeted by YM BioSciences. These companies may have substantially more resources than YM BioSciences, which could adversely affect the Company's position in the market place.

FINANCIAL FORECASTS & VALUATION

The following assumptions refer to YMI's revenue model, annual earnings model, and valuation analysis. The revenue estimates are for nimotuzumab royalties in the US, nimotuzumab royalties received from Oncoscience AG in Europe, Kuhnle Pharma Co. in Korea, Daiichi Sankyo Co. Ltd. in Japan, and Innogene Kalbiotech in Singapore, CYT997 royalties in the U.S., and CYT387 royalties in the U.S. We have not included potential upfront fees or milestone revenue from, nor expenses associated with, YMI's other product candidates.

HISTORICAL BALANCE SHEET

CAD\$ in thousands

Fiscal Year ended June 30

ASSETS	6/30/2009
Current Assets	
Cash & equivalents	42,051
Accounts receivable	565
Prepaid expenses	353
Total Current Assets	\$ 42,968
Property & equipment	\$ 97
Intangible assets	3,005
Other	-
Total Assets	\$ 46,070
LIABILITIES	
Current Liabilities	
Accounts payable	\$ 431
Accrued liabilities	487
Deferred revenue, current portion	2,550
Total Current Liabilities	\$ 3,467
Deferred revenue, non-current portion	\$ 2,898
Total Liabilities	\$ 6,366
Shareholders Equity	
Share capital	\$ 172,921
Share purchase warrants	-
Contributed surplus	13,035
Deficit	(146,252)
Total Shareholders Equity	\$ 39,704
Total liabilities & equity	\$ 46,070

REVENUE ASSUMPTIONS

Assumes Oncoscience AG will develop nimotuzumab for pediatric and adult glioma, and YMI will receive 15% of product sales in Europe.

Assumes Kuhnle Pharma Co. and Daiichi Sankyo Co. Ltd. will develop nimotuzumab for non-small cell lung cancer (NSCLC) and gastric cancer, and YMI will receive 15% of product sales in Korea and Japan.

Assumes Innogene Kalbiotech will develop nimotuzumab for cervical cancer, and YMI will receive 15% of product sales.

Assumes YMI will out-license nimotuzumab for pediatric and adult glioma, palliative NSCLC, brain metastases from NSCLC, gastric cancer, and cervical cancer for the U.S. market on approval, and the Company will receive an upfront payment of \$100,000,000, recognition of which, as revenue, will be deferred and amortized to income over a 60-month period, and a royalty of 15% of total product sales in each indication. We also assume that YMI will receive milestone payments that add upside to our estimates.

We also expect Innogene Kalbiotech to develop nimotuzumab for cervical cancer in Indonesia, the Philippines, Malaysia, and South Africa, which we have not modeled at this time but could represent significant upside to our estimates. We expect Daiichi-Sankyo, the Japanese licensee of nimotuzumab, Kuhnle Pharma Co., the Korean licensee of nimotuzumab, and YMI's other partners to develop the drug for treatment of various solid tumors currently in clinical trials, but we have excluded potential revenue in our model at this time. We believe these opportunities could also add significant upside to our estimates.

Assumes YMI will develop CYT997 for glioblastoma multiforme and CYT387 for myeloproliferative diseases and out-license the drugs on approval for a 15% royalty on total product sales.

Other revenue assumptions include:

LICENSING & MILESTONES

Assumes Oncoscience AG will find a sub-licensee to aid distribution upon the commercial release of nimotuzumab in FY2011. Assumes an up-front payment of \$75,000,000, 50% of which we believe the Company is eligible to receive, recognition of which, as revenue, will be deferred and amortized to income over a 48-month period. The projected revenue also includes existing licensing and milestone agreements.

DRUG SALES

All currency amounts expressed in the following section are in US Dollars. Where applicable, foreign exchange rate is USD\$1.00 equals CAD\$1.0612.

Nimotuzumab: Pediatric & Adult Glioma - EU

Year penetration starts	2011	Prevalence	45000
Starting penetration rate	5%	Percent addressable	80%
Years between penetration start and peak	5	Market growth rate	1%
Peak penetration	20%	Price per patient per year	\$20,000
Duration of peak penetration in years	3	Treatment price growth	1%
Retention rate in decline years	90%	Royalty rate	15%
Stage of development	Phase III	Probability of commercialization	80%

- There are approximately 45,000 pediatric and adult glioma patients in Europe;²⁰
- Approximately 80% of the patients will be eligible for nimotuzumab;
- Nimotuzumab penetrates the market beginning in FY2011 at a price of \$20,000 per treatment cycle;

²⁰ The Globocan 2002 Database – web-page address <http://www-dep.iarc.fr/globocan/database.htm> International Agency for Research on Cancer (IARC), part of the World Health Organization (WHO).

- The price per prescription grows at an annual rate of 1%; and
- Nimotuzumab penetrates 5% of the addressable market in the FY2011 launch year and reaches a peak penetration of 20% of the addressable market in FY2016.

Nimotuzumab: Pediatric & Adult Glioma - U.S.

Year penetration starts	2012	Prevalence	115000
Starting penetration rate	5%	Percent addressable	80%
Years between penetration start and peak	5	Market growth rate	1%
Peak penetration	20%	Price per patient per year	\$30,000
Duration of peak penetration in years	3	Treatment price growth	1%
Retention rate in decline years	90%	Royalty rate	15%
Stage of development	Phase III	Probability of commercialization	15%

- There are approximately 115,000 pediatric and adult glioma patients in the U.S.;²¹
- Approximately 80% of the patients will be eligible for nimotuzumab;
- Nimotuzumab penetrates the market beginning in FY2012 at a price of \$30,000 per treatment cycle;
- The price per prescription grows at an annual rate of 1%; and
- Nimotuzumab penetrates 5% of the addressable market in the FY2012 launch year and reaches a peak penetration of 20% of the addressable market in FY2017.

Nimotuzumab: Non-Small-Cell Lung Cancer (NSCLC) - U.S.

Year penetration starts	2012	Prevalence	324000
Starting penetration rate	3%	Percent addressable	40%
Years between penetration start and peak	5	Market growth rate	1%
Peak penetration	20%	Price per patient per year	\$30,000
Duration of peak penetration in years	3	Treatment price growth	1%
Retention rate in decline years	90%	Royalty rate	15%
Stage of development	Phase II	Probability of commercialization	15%

- There are approximately 324,000 NSCLC patients in the U.S.;²²
- Approximately 40% of the patients will be eligible for nimotuzumab as the preferred treatment method;
- Nimotuzumab penetrates the market beginning in FY2012 at a price of \$30,000 per treatment cycle;
- The price per prescription grows at an annual rate of 1%; and
- Nimotuzumab penetrates 3% of the addressable market in the FY2012 launch year and reaches a peak penetration of 20% of the addressable market in FY2017.

²¹ SEER Cancer Statistics Review, 1973-2004, National Cancer Institute. Surveillance Epidemiology and End Results (SEER), 1973-2004.

²² SEER Cancer Statistics Review, 1973-2004, National Cancer Institute. Surveillance Epidemiology and End Results (SEER), 1973-2004.

Nimotuzumab: Non-Small-Cell Lung Cancer (NSCLC) - Korea & Japan

Year penetration starts	2013	Prevalence	82000
Starting penetration rate	3%	Percent addressable	40%
Years between penetration start and peak	5	Market growth rate	1%
Peak penetration	20%	Price per patient per year	\$25,000
Duration of peak penetration in years	3	Treatment price growth	1%
Retention rate in decline years	90%	Royalty rate	15%
Stage of development	Phase II	Probability of commercialization	30%

- There are approximately 82,000 NSCLC patients in Korea and Japan;²³
- Approximately 40% of the patients will be eligible for nimotuzumab as the preferred treatment method over existing treatment options;
- Nimotuzumab penetrates the market beginning in FY2013 at a price of \$25,000 per treatment cycle;
- The price per prescription grows at an annual rate of 1%; and
- Nimotuzumab penetrates 3% of the addressable market in the FY2013 launch year and reaches a peak penetration of 20% of the addressable market in FY2018.

Nimotuzumab: Gastric Cancer - Korea & Japan

Year penetration starts	2013	Prevalence	100000
Starting penetration rate	3%	Percent addressable	50%
Years between penetration start and peak	5	Market growth rate	1%
Peak penetration	20%	Price per patient per year	\$25,000
Duration of peak penetration in years	3	Treatment price growth	1%
Retention rate in decline years	90%	Royalty rate	15%
Stage of development	Phase II	Probability of commercialization	30%

- There are approximately 100,000 gastric cancer patients in Korea and Japan;²⁴
- Approximately 50% of the patients will be eligible for nimotuzumab as the preferred treatment method;
- Nimotuzumab penetrates the market beginning in FY2013 at a price of \$25,000 per treatment cycle;
- The price per prescription grows at an annual rate of 1%; and
- Nimotuzumab penetrates 3% of the addressable market in the FY2013 launch year and reaches a peak penetration of 20% of the addressable market in FY2018.

²³ The Globocan 2002 Database – web-page address <http://www-dep.iarc.fr/globocan/database.htm> International Agency for Research on Cancer (IARC), part of the World Health Organization (WHO).

²⁴ The Globocan 2002 Database – web-page address <http://www-dep.iarc.fr/globocan/database.htm> International Agency for Research on Cancer (IARC), part of the World Health Organization (WHO).

Nimotuzumab: Gastric Cancer - EU

Year penetration starts	2013	Prevalence	180000
Starting penetration rate	3%	Percent addressable	50%
Years between penetration start and peak	5	Market growth rate	1%
Peak penetration	20%	Price per patient per year	\$20,000
Duration of peak penetration in years	3	Treatment price growth	1%
Retention rate in decline years	90%	Royalty rate	15%
Stage of development	Phase II	Probability of commercialization	30%

- There are approximately 180,000 gastric cancer patients in Europe;²⁵
- Approximately 50% of the patients will be eligible for nimotuzumab as the preferred treatment method;
- Nimotuzumab penetrates the market beginning in FY2013 at a price of \$20,000 per treatment cycle;
- The price per prescription grows at an annual rate of 1%; and
- Nimotuzumab penetrates 3% of the addressable market in the FY2013 launch year and reaches a peak penetration of 20% of the addressable market in FY2018.

Nimotuzumab: Gastric Cancer - U.S.

Year penetration starts	2013	Prevalence	64000
Starting penetration rate	3%	Percent addressable	50%
Years between penetration start and peak	5	Market growth rate	1%
Peak penetration	20%	Price per patient per year	\$30,000
Duration of peak penetration in years	3	Treatment price growth	1%
Retention rate in decline years	90%	Royalty rate	15%
Stage of development	Phase II	Probability of commercialization	15%

- There are approximately 64,000 gastric cancer patients in the U.S.;²⁶
- Approximately 25% of the patients will be eligible for nimotuzumab as the preferred treatment method;
- Nimotuzumab penetrates the market beginning in FY2013 at a price of \$30,000 per treatment cycle;
- The price per prescription grows at an annual rate of 1%; and
- Nimotuzumab penetrates 3% of the addressable market in the FY2013 launch year and reaches a peak penetration of 20% of the addressable market in FY2018.

²⁵ The Globocan 2002 Database – web-page address <http://www-dep.iarc.fr/globocan/database.htm> International Agency for Research on Cancer (IARC), part of the World Health Organization (WHO).

²⁶ SEER Cancer Statistics Review, 1973-2004, National Cancer Institute. Surveillance Epidemiology and End Results (SEER), 1973-2004.

Nimotuzumab: Cervical Cancer - U.S.

Year penetration starts	2013	Prevalence	250000
Starting penetration rate	3%	Percent addressable	50%
Years between penetration start and peak	5	Market growth rate	0%
Peak penetration	15%	Price per patient per year	\$30,000
Duration of peak penetration in years	3	Treatment price growth	1%
Retention rate in decline years	90%	Royalty rate	15%
Stage of development	Phase II	Probability of commercialization	15%

- There are approximately 250,000 cervical cancer patients in the U.S.;²⁷
- Approximately 50% of the patients will be eligible for nimotuzumab as the preferred treatment method over existing treatment options;
- Nimotuzumab penetrates the market beginning in FY2013 at a price of \$30,000 per treatment cycle;
- The price per prescription grows at an annual rate of 1%; and
- Nimotuzumab penetrates 3% of the addressable market in the FY2013 launch year and reaches a peak penetration of 20% of the addressable market in FY2018.

CYT997: Glioblastoma Multiforme - U.S.

Year penetration starts	2015	Prevalence	124000
Starting penetration rate	5%	Percent addressable	25%
Years between penetration start and peak	5	Market growth rate	1%
Peak penetration	20%	Price per patient per year	\$30,000
Duration of peak penetration in years	3	Treatment price growth	1%
Retention rate in decline years	90%	Royalty rate	15%
Stage of development	Phase II	Probability of commercialization	25%

- The prevalence of CNS tumors in the U.S. is approximately 124,000, and about 25% of the cases are glioblastoma multiforme;²⁸
- Approximately 80% of the patients will be eligible for CYT997;
- CYT997 penetrates the market beginning in FY2015 at a price of \$30,000 per treatment cycle;
- The price per prescription grows at an annual rate of 1%; and
- CYT997 penetrates 5% of the addressable market in the FY2015 launch year and reaches a peak penetration of 20% of the addressable market in FY2020.

²⁷ SEER Cancer Statistics Review, 1973-2004, National Cancer Institute. Surveillance Epidemiology and End Results (SEER), 1973-2004.

²⁸ SEER Cancer Statistics Review, 1973-2004, National Cancer Institute. Surveillance Epidemiology and End Results (SEER), 1973-2004.

CYT387: Myeloproliferative Diseases - U.S.

Year penetration starts	2016	Prevalence	200000
Starting penetration rate	3%	Percent addressable	80%
Years between penetration start and peak	4	Market growth rate	1%
Peak penetration	20%	Price per patient per year	\$30,000
Duration of peak penetration in years	4	Treatment price growth	1%
Retention rate in decline years	90%	Royalty rate	15%
Stage of development	Phase I	Probability of commercialization	15%

- There are approximately 200,000 patients with myeloproliferative diseases, including Polycythemia vera (PV), essential thrombocythemia (ET), and idiopathic myelofibrosis (MF), in the U.S.;
- Approximately 80% of the patients will be eligible for CYT387;
- CYT387 penetrates the market beginning in FY2016 at a price of \$30,000 per treatment cycle;
- The price per prescription grows at an annual rate of 1%; and
- CYT387 penetrates 3% of the addressable market in the FY2015 launch year and reaches a peak penetration of 20% of the addressable market in FY2020.

(Intentionally left blank)

INCOME STATEMENT

CAD\$ in thousands, except per share data

FY ending June 30

	2010	2011	2012	2013	2014
	2010	2011	2012	2013	2014
Total revenue	\$ 4,500	\$ 5,788	\$ 60,744	\$ 163,886	\$ 248,330
COGS	-	1,818	3,037	8,194	12,417
Gross profit	\$ 4,500	\$ 3,970	\$ 57,706	\$ 155,692	\$ 235,914
Operating expenses					
R&D	\$ 20,000	\$ 21,000	\$ 15,000	\$ 15,000	\$ 10,000
Selling & marketing	-	-	-	-	-
General & administrative	5,000	5,250	5,500	5,750	6,000
Total expense	25,000	26,250	20,500	20,750	16,000
Operating profit	\$ (20,500)	\$ (22,280)	\$ 37,206	\$ 134,942	\$ 219,914
Non-operating income/expense					
Interest expense	-	-	-	-	-
Interest income	-	-	-	-	-
Other	-	-	-	-	-
Total non-operating	-	-	-	-	-
Pretax profit	\$ (20,500)	\$ (22,280)	\$ 37,206	\$ 134,942	\$ 219,914
Income tax	-	-	14,138	51,278	83,567
Net income	\$ (20,500)	\$ (22,280)	\$ 23,068	\$ 83,664	\$ 136,347
Earnings (loss) per share	\$ (0.31)	\$ (0.34)	\$ 0.35	\$ 1.26	\$ 2.05
Diluted shares outstanding	65,416	65,666	65,916	66,166	66,416

Income Statement Assumptions:

- COGS of 5.0% of total sales starting in FY2011;
- Research and Development (R&D) expenses of \$20 million in FY2010, \$21 million in FY2011, \$15 million in FY2012 and FY2013, and \$10 million in FY2014;
- Zero Sales and Marketing (S&M) expense for nimotuzumab, CYT997, and CYT387;
- General and Administrative (G&A) expenses of \$5 million in FY2010, \$5.25 million in FY2011, \$5.5 million in FY2012, \$5.75 million in FY2013, and \$6 million in FY2014;
- Income tax rate of 38%;
- The number of shares outstanding increases due to the exercise of stock options and warrants.

DISCOUNTED CASH FLOW (DCF) MODEL

Our DCF model, using a discount rate of 12.5%, suggests a value of USD\$5.49 for YMI shares. Where applicable, we assume the foreign exchange rate is USD\$1.00 equals CAD\$1.0612.

<i>CAD\$ in thousands, except per share data</i>	2010	2011	2012	2013	2014
	2010	2011	2012	2013	2014
Revenue	\$ 4,500	\$ 5,788	\$ 60,744	\$ 163,886	\$ 248,330
Operating income	(20,500)	(22,280)	37,206	134,942	219,914
Net income	(20,500)	(22,280)	23,068	83,664	136,347
Depreciation/amortization	1,000	1,000	1,000	1,000	1,000
Stock-based compensation	2,000	2,000	2,000	2,000	2,000
Tax loss carryforwards	-	-	-	-	-
Capital expenditures	(100)	(125)	(125)	(150)	(150)
Asset acquisitions					
Other					
Total cash flow adjustments	2,900	2,875	2,875	2,850	2,850
Free cash flow	\$ (17,600)	\$ (19,405)	\$ 25,943	\$ 86,514	\$ 139,197
Risk-adjusted free cash flow	\$ (17,600)	\$ (19,405)	\$ 10,258	\$ 23,152	\$ 34,933

USD\$ in thousands, except per share data

Discount Rate	Discounted Cash Flows (2008 - 2023)	PV of Terminal Value at a Perpetual growth rate of rFCF			Enterprise Value		
		2.0%	3.0%	4.0%	2.0%	3.0%	4.0%
7.5%	\$359,075.13	\$ 364,911	\$ 450,374	\$ 584,675	\$723,986	\$809,450	\$943,750
10.0%	\$282,550.23	\$ 177,703	\$ 205,081	\$ 241,584	\$460,254	\$487,631	\$524,134
12.5%	\$224,116.42	\$ 96,649	\$ 107,870	\$ 121,731	\$320,766	\$331,987	\$345,848
15.0%	\$179,020.73	\$ 56,139	\$ 61,414	\$ 67,647	\$235,160	\$240,434	\$246,668
17.5%	\$143,868.53	\$ 34,102	\$ 36,811	\$ 39,922	\$177,970	\$180,679	\$183,790

Discount Rate	Net Debt	Total Equity Value			Value per Diluted Share		
		2.0%	3.0%	4.0%	2.0%	3.0%	4.0%
7.5%	\$ (32,787)	\$756,773	\$809,450	\$976,537	\$ 11.39	\$ 12.19	\$ 14.70
10.0%	(32,787)	\$493,041	\$520,418	\$556,921	\$ 7.42	\$ 7.84	\$ 8.39
12.5%	(32,787)	\$353,553	\$364,774	\$378,635	\$ 5.32	\$ 5.49	\$ 5.70
15.0%	(32,787)	\$267,947	\$273,221	\$279,455	\$ 4.03	\$ 4.11	\$ 4.21
17.5%	(32,787)	\$210,757	\$213,466	\$216,577	\$ 3.17	\$ 3.21	\$ 3.26

Discount Rate	Terminal Value as % Enterprise Value			Implied EBITDA Multiple		
	2.0%	3.0%	4.0%	2.0%	3.0%	4.0%
7.5%	50.4%	55.6%	62.0%	11.57	14.28	18.54
10.0%	38.6%	42.1%	46.1%	7.95	9.18	10.81
12.5%	30.1%	32.5%	35.2%	6.06	6.76	7.63
15.0%	23.9%	25.5%	27.4%	4.89	5.35	5.90
17.5%	19.2%	20.4%	21.7%	4.11	4.43	4.81

DISCLOSURES

ANALYST(S) CERTIFICATION: The analyst(s) responsible for covering the securities in this report certify that the views expressed in this research report accurately reflect their personal views about YM BioSciences, Inc. (the "Company") and its securities. The analyst(s) responsible for covering the securities in this report certify that no part of their compensation was, is, or will be directly or indirectly related to the specific recommendation or view contained in this research report.

MEANINGS OF RATINGS: Our rating system is based upon 12 to 36 month price targets. **BUY** describes stocks that we expect to appreciate by more than 20%. **HOLD** describes stocks that we expect to change plus or minus 20%. **SELL** describes stocks that we expect to decline by more than 20%. **SC** describes stocks that Griffin Securities has **Suspended Coverage** of this Company and price target, if any, for this stock, because it does not currently have a sufficient basis for determining a rating or target and/or Griffin Securities is redirecting its research resources. The previous investment rating and price target, if any, are no longer in effect for this stock and should not be relied upon. **NR** describes stocks that are **Not Rated**, indicating that Griffin Securities does not cover or rate this Company.

DISTRIBUTION OF RATINGS: Currently Griffin Securities has assigned BUY ratings or NO RATINGS on all of the companies it covers. The Company has provided investment-banking services for 17% of companies in which it has had BUY ratings in the past 12 months, 0% for companies in which it has had NR or no coverage in the past 12 months or has suspended coverage (SC) in the past 12 months.

MARKET MAKING: Griffin Securities does not maintain a market in the shares of this Company or any other Company mentioned in the report.

COMPENSATION OR SECURITIES OWNERSHIP: The analyst(s) responsible for covering the securities in this report receive compensation based upon, among other factors, the overall profitability of Griffin Securities, including profits derived from investment banking revenue. The analyst(s) that prepared the research report did not receive any compensation from the Company or any other companies mentioned in this report in connection with the preparation of this report. The analysts responsible for covering the securities in this report currently do not own common stock in the Company, but in the future may from time to time engage in transactions with respect to the Company or other companies mentioned in the report. Griffin Securities from time to time in the future may request expenses to be paid for copying, printing, mailing and distribution of the report by the Company and other companies mentioned in this report. Griffin Securities expects to receive, or intends to seek, compensation for investment banking services from the Company in the next three months.

PRICE CHART



11/15/2004 – Initiating Coverage: share price: \$2.25; rating: BUY; 12-month price target: \$5.40; **10/25/2005** – Research Update: share price: \$2.65; rating: BUY; 12-month price target: \$6.00; **8/08/2007** – Research Update: share price: \$1.45; rating: BUY; 12-month price target: \$6.50; **8/24/2009** – Research Update: share price: \$0.93; rating: BUY; 12-month price target: \$5.00; **10/28/2009** – Research Update: share price: \$1.07; rating: BUY; 12-month price target: \$5.50.

FORWARD-LOOKING STATEMENTS: This Report contains forward-looking statements, which involve risks and uncertainties. Actual results may differ significantly from such forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in the “Risk Factors” section in the SEC filings available in electronic format through SEC Edgar filings at www.SEC.gov on the Internet.

GENERAL: Griffin Securities, Inc. (“Griffin Securities”) a FINRA member firm with its principal office in New York, New York, USA is an investment banking firm providing corporate finance, merger and acquisitions, brokerage, and investment opportunities for institutional, corporate, and private clients. The analyst(s) are employed by Griffin Securities. Our research professionals provide important input into our investment banking and other business selection processes. Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients that reflect opinions that are contrary to the opinions expressed herein, and our proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein.

Griffin Securities may from time to time perform corporate finance or other services for some companies described herein and may occasionally possess material, nonpublic information regarding such companies. This information is not used in preparation of the opinions and estimates herein. While the information contained in this report and the opinions contained herein are based on sources believed to be reliable, Griffin Securities has not independently verified the facts, assumptions and estimates contained in this report. Accordingly, no representation or warranty, express or implied, is made as to, and no reliance should be placed on, the fairness, accuracy, completeness or correctness of the information and opinions contained in this report.

The information contained herein is not a complete analysis of every material fact in respect to any company, industry or security. This material should not be construed as an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. We are not soliciting any action based on this material. It is for the general information of clients of Griffin Securities. It does not take into account the particular investment objectives, financial situations, or needs of individual clients. Before acting on any advice or recommendation in this material, clients should consider whether it is suitable for their particular circumstances and, if necessary, seek professional advice. Certain transactions - including those involving futures, options, and other derivatives as well as non-investment-grade securities - give rise to substantial risk and are not suitable for all investors. The material is based on information that we consider reliable, but we do not represent that it is accurate or complete, and it should not be relied on as such. The information contained in this report is subject to change without notice and Griffin Securities assumes no responsibility to update the report. In addition, regulatory, compliance, or other reasons may prevent us from providing updates.

DISCLOSURES FOR OTHER COMPANIES MENTIONED IN THIS REPORT: To obtain applicable current disclosures in electronic format for the subject companies in this report, please refer to SEC Edgar filings at www.SEC.gov. In particular, for a description of risks and uncertainties related to subject companies' businesses in this report, see the “Risk Factors” section in the SEC filings.