

ONCOLOGY MEDICINES

MARKETED PRODUCTS

Arimidex (anastrozole) is the world's leading aromatase inhibitor for the treatment of breast cancer.

Casodex (bicalutamide) is the world's leading anti-androgen therapy for the treatment of prostate cancer.

Zoladex (goserelin acetate implant), in one- and three-month depots, is the world's second largest LHRH agonist for the treatment of prostate cancer, breast cancer and certain benign gynaecological disorders.

Iressa (gefitinib) is an epidermal growth factor receptor-tyrosine kinase inhibitor (EGFR-TKI) that acts to block signals for cancer cell growth and survival in non-small cell lung cancer.

Faslodex (fulvestrant) is an injectable oestrogen receptor antagonist for the treatment of breast cancer, with no known agonist effects, that down-regulates the oestrogen receptor.

Nolvadex (tamoxifen citrate) remains a widely prescribed breast cancer treatment outside the US.

Ethylol (amifostine) is used to help prevent certain side effects of specific types of chemotherapy and radiotherapy that are used to treat cancer.

Abraxane[®] (paclitaxel protein-bound particles for injectable suspension) (albumin-bound), discovered, developed and owned by Abraxis BioScience, Inc., uses a novel technology to deliver paclitaxel for the treatment of breast cancer. We co-promote Abraxane[®] in the US under an agreement with Abraxis.

2007 IN BRIEF

- > **Arimidex sales up 10% to \$1.7 billion.** It remains the leading hormonal breast cancer therapy in the US, Japan and France.
- > **Casodex sales growth continued with total sales of over \$1 billion, up 6%.**
- > **Zoladex sales of over \$1 billion, up 4%.**
- > **ZD4054 progressed into phase III development for hormone-resistant prostate cancer.**
- > **Phase III trials of Zactima in non-small cell lung cancer (NSCLC) and in medullary thyroid cancer continued.**
- > **Pivotal trials of Recentin in colorectal cancer (CLC) and NSCLC continued to recruit patients.**

PERFORMANCE

	2007			2006			2005	2007 compared to 2006		2006 compared to 2005	
	Sales \$m	Growth underlying \$m	exchange effects \$m	Sales \$m	Growth underlying \$m	exchange effects \$m		Growth underlying %	Growth reported %	Growth underlying %	Growth reported %
Arimidex	1,730	151	71	1,508	338	(11)	1,181	10	15	29	28
Casodex	1,335	74	55	1,206	104	(21)	1,123	6	11	9	7
Zoladex	1,104	39	57	1,008	17	(13)	1,004	4	10	1	-
Iressa	238	(1)	2	237	(30)	(6)	273	-	-	(11)	(13)
Faslodex	214	18	10	186	45	1	140	10	15	32	33
Nolvadex	83	(8)	2	89	(22)	(3)	114	(9)	(7)	(19)	(22)
Abraxane [®]	62	44	-	18	18	-	-	244	244	-	-
Ethylol ¹	43	43	-	-	-	-	-	n/m	n/m	n/m	n/m
Other	10	(1)	1	10	-	-	10	(10)	-	-	-
Total	4,819	359	198	4,262	470	(53)	3,845	8	13	12	11

¹ Sales of this MedImmune product are consolidated in AstraZeneca accounts from 1 June 2007. As a result, there are no prior period sales included.

PIPELINE

Compound	Mechanism	Areas under investigation	Phase			Estimated filing date	
			I	II	III	Europe	US
NCEs							
Zactima	VEGF/EGF TK inhibitor with RET kinase activity	NSCLC	■	■	■	4Q 2008	4Q 2008
Recentin ²	VEGF signalling inhibitor (VEGFR-TKI)	NSCLC and CRC	■	■	■	2010	2010
Recentin	VEGF signalling inhibitor (VEGFR-TKI)	recurrent glioblastoma	■	■	■	2010	2010
ZD4054	endothelin A receptor antagonist	hormone-resistant prostate cancer	■	■	■	2011	2011
Zactima	VEGF/EGF TK inhibitor with RET kinase activity	medullary thyroid cancer	■	■		4Q 2008	4Q 2008
AZD6244 (ARRY-142886)	MEK inhibitor	solid tumours	■	■			
AZD2281	PARP inhibitor	breast cancer	■	■			
AZD0530	SRC kinase inhibitor	solid tumours and haematological malignancies	■	■			
MEDI-561	Hsp 90 inhibitor	solid tumours	■	■			2010
AZD1152	aurora kinase inhibitor	solid tumours and haematological malignancies	■				
AZD4769	EGFR tyrosine kinase inhibitor	solid tumours	■				
AZD4877	cell cycle agent	solid tumours and haematological malignancies	■				
AZD8931	erbB kinase inhibitor	solid tumours	■				
AZD7762	CHK1 kinase inhibitor	solid tumours	■				
AZD8330 (ARRY-424704)	MEK inhibitor	solid tumours	■				
CAT-8015	recombinant immunotoxin	haematological malignancies	■				
MEDI-538	CD19 B cells	leukaemia/lymphoma	■				
Line extensions							
Faslodex	oestrogen receptor antagonist	first-line advanced breast cancer	■	■	■		
Faslodex	oestrogen receptor antagonist	adjuvant	■	■	■		
Iressa	EGFR-TK inhibitor	NSCLC	■	■	■	2Q 2008	

² This compound is in phase II/III development. For discontinued projects see page 30.

Abraxane® was approved by the FDA in January 2005. It is indicated for the treatment of breast cancer after failure of combination chemotherapy for metastatic disease or relapse within six months of adjuvant chemotherapy. Our co-promotion of Abraxane® in the US under an agreement with Abraxis BioScience, Inc. commenced in July 2006. The agreement gives us access to the key US chemotherapy market and Abraxane® complements and extends our US oncology product portfolio.

PIPELINE

Zactima (vandetanib) is a potential new oral anti-cancer therapy, which has a unique profile that fights cancer through two clinically proven mechanisms. It blocks the development of a tumour's blood supply (anti-VEGFR) and blocks the growth and survival of the tumour itself (anti-EGFR). *Zactima* also inhibits RET-kinase activity, an important growth driver in certain types of thyroid cancer.

Zactima is being investigated in a number of phase III clinical trials across the world to assess its impact on survival and on the lives of patients with NSCLC and medullary thyroid cancer.

In 2005, promising early data in hereditary medullary thyroid cancer led to orphan drug designation for *Zactima* by the FDA and the European Medicines Agency, as well as fast-track status for regulatory review by the FDA. Orphan drug designation encourages the development of new products that demonstrate promise for life-threatening or very serious conditions that are rare and affect relatively few people. Fast-track designation potentially facilitates and expedites the process for the review by the FDA of new drugs intended to treat serious or life-threatening conditions and that demonstrate the potential to address unmet medical needs. A randomised phase III study of *Zactima* versus placebo in medullary thyroid cancer has completed enrolment.

In addition, the anti-cancer activity of *Zactima* continues to be evaluated in other tumour types, including colorectal, glioma, head and neck, breast and prostate cancers.

Recentin (cediranib) is a highly potent, selective, orally active inhibitor of vascular endothelial cell growth factor (VEGF) receptor signalling in solid tumours. *Recentin* inhibits all three VEGF receptors irrespective of activating ligand. Following the decision in 2005 to accelerate the development of *Recentin*, and the subsequent commencement of the pivotal phase II/III NSCLC study that year, the pivotal colorectal cancer (CRC) programme started in 2006. The CRC programme includes a head-to-head study comparing *Recentin* plus FOLFOX (a combination chemotherapy treatment made up of a number of drugs) with bevacizumab (Avastin™) plus FOLFOX in first-line treatment of CRC. It also includes two other studies in CRC, namely a second-line head-to-head study with bevacizumab and a first-line study involving *Recentin* with and without standard chemotherapy. Phase II studies of *Recentin* in gastrointestinal stromal tumours, and renal and breast cancer, are continuing. As well as these programmes, the US National Cancer Institute (NCI) is now recruiting patients for more than 15 studies in a number of different tumour settings. Encouraging data for *Recentin* from two completed NCI studies to treat renal cancer and glioblastoma were presented in 2007. The data in recurrent glioblastoma were published in the journal 'Cancer Cell' in January 2007 and presented at the American Society of Clinical Oncology meeting in June 2007. These data have led to the commencement of a development programme for *Recentin* in recurrent glioblastoma.

ZD4054 is a potent and specific endothelin A-receptor antagonist that reduces tumour growth and survival, lessening the potential for invasion and metastasis. ZD4054 entered phase III development in 2007 for patients with hormone-resistant prostate cancer (HRPC), an area of great unmet need with few treatment options.

This move into phase III development is based on promising early data from the EPOC phase II study presented at the European Congress of Clinical Oncology in September 2007. The trial suggests that ZD4054 10mg once-daily has the potential to increase the median overall survival time by approximately seven months in men with asymptomatic or mildly symptomatic metastatic HRPC, with the benefit of a generally well-tolerated side effect profile and the convenience of a once-daily tablet.

The phase III ENTHUSE global trial programme, which consists of three studies, is in the early stage of start-up and began enrolling the first patients in the fourth quarter of 2007. These trials will investigate the efficacy of ZD4054 in metastatic HRPC, both as monotherapy and in combination with docetaxel, and in non-metastatic HRPC.

Our early oncology pipeline includes novel compounds that target signalling pathways believed to be pivotal in cancer cell growth, invasion and survival, with two products in phase II and nine others in phase I development. Phase II data from AZD6244, a potent MEK inhibitor licensed from Array BioPharma, Inc., was reported in December 2007. AZD6244 showed biological activity in lung cancer and melanoma and studies will now focus on its use in combination with standard and other novel therapies, rather than its development as monotherapy. Phase II studies with the poly (ADP-ribose) polymerase (PARP) inhibitor AZD2281 have started and will initially focus on BRCA-mutated breast and ovarian cancer as well as other cancers where DNA repair could be defective.

The dual-specific Src/Abl kinase inhibitor, AZD0530, has shown a dramatic effect on biomarkers of cell motility and bone resorption and is starting phase II studies in a range of malignancies. Among the compounds from the early portfolio continuing in development are AZD4877, a novel inhibitor of cell cycle; AZD7762, a tumour-selective chemo sensitiser; and AZD8931.

MedImmune

MedImmune is developing potential new cancer treatments using biological approaches with highly defined molecular targets for patient populations with unmet medical needs.

In 2007, oncology trials underway included those for IPI-504 (also known as MEDI-561), a drug candidate designed to inhibit heat shock protein 90 (Hsp90). Hsp90 is an emerging cancer target, which is currently being evaluated as a potential treatment for three solid tumour cancers.

Development of MEDI-538, a recombinant single-chain bi-specific T-cell engager (BiTE™) molecule targeting the CD19 antigen is progressing. This candidate drug is the first and only BiTE™-inspired molecule in clinical trials, and is currently in phase I and phase II clinical development for the treatment of various B-cell malignancies. In 2007, preliminary data was released from a continuing phase I study of MEDI-538 in patients with late-stage non-Hodgkin's lymphoma.

ONCOLOGY MEDICINES CONTINUED

MedImmune is continuing the development of CAT-8015 with four phase I dose escalation studies in progress in chronic lymphocytic leukaemia, hairy cell leukaemia, CD22-positive non-Hodgkin's lymphoma and paediatric acute lymphoblastic leukaemia. CAT-8015 is an immunotoxin that targets CD22, which is expressed on adult cells, B-cell leukaemia and lymphomas.

PERFORMANCE 2007**Reported performance**

Oncology sales increased by 13% to reach \$4,819 million in 2007, compared with \$4,262 million in 2006.

Underlying performance

Excluding the effects of exchange, Oncology sales grew by 8%. *Arimidex* sales reached \$1,730 million, up 10%. In the US, sales of *Arimidex* rose by 13% to \$694 million. Total prescriptions for *Arimidex* increased nearly 5.3% compared with 1.3% growth in the market for hormonal treatments for breast cancer. *Arimidex* sales in other markets increased by 8% to \$1,036 million. Sales for the full year were up 6% in Western Europe and increased 9% in Japan.

Casodex sales increased by 6% to \$1,335 million. Sales in the US for the full year were up 1% to \$298 million. Sales in other markets, which account for more than 75% of product sales, were up 8%, on 6% growth in Western Europe and 13% sales growth in Japan.

Iressa sales were unchanged for the full year. Sales in Japan increased 4% for the year; sales in China were up 24%.

Faslodex sales increased 10% to \$214 million for the full year, on growth of 3% in the US and 18% sales growth in other markets.

PERFORMANCE 2006**Reported performance**

Oncology sales increased by 11% to \$4,262 million in 2006 principally due to the continued strong *Arimidex* performance.

Underlying performance

Excluding the effects of exchange, Oncology sales grew by 12%.

In the US, sales of *Arimidex* were up 29% to \$614 million. Total prescriptions increased by 21%. *Arimidex* share of total prescriptions for hormonal treatments for breast cancer was 37.5% in December, up 2.7 percentage points during the year. In other markets, *Arimidex* sales grew by 29% due to an increase in sales in Europe (up 30%) and Asia Pacific (up 27%) on strong volumes.

Casodex sales increased by 9% to \$1,206 million. In the US, sales were up 23% to \$295 million. Sales in other markets were up 5%, with sales in Japan up 10% to \$286 million.

Iressa sales in markets outside the US increased by 10%. Sales in the Asia Pacific region were up 15% to \$207 million.

Worldwide sales of *Faslodex* were up 32% to \$186 million, largely due to the 74% increase in Europe. Sales in the US were up 12%.

Zoladex sales exceeded \$1 billion for the second year in a row with declines in the US offset by growth elsewhere.

We have recorded alliance revenue of \$18 million from our co-promotion arrangements with regard to Abraxane®.