Company Overview

June 2005

Abgenix

DELIVERING ON THE
PROMISE OF ANTIBODIES

Forward-Looking Statements

Statements made about Abgenix's technologies, product development activities, including clinical trials and clinical trial results, collaborative arrangements, process sciences and manufacturing activities, other than statements of historical fact, and about its projected financial results, potential revenues, use of cash, financing activities, and the achievement of milestone or similar payments, are forward looking statements and are subject to a number of uncertainties that could cause actual results to differ materially from the statements made, including risks associated with the success of clinical trials, the progress of research and product development programs, product manufacturing, regulatory approval processes and meeting requirements for regulatory approval, competitive products and services, current and future capital requirements and the extent and breadth of Abgenix's patent portfolio, and other factors set forth in Abgenix's public filings with the Securities and Exchange Commission including Abgenix's Form 10-K for the year ended December 31, 2004, and periodic reports on Form 10-Q and Form 8-K. Abgenix is providing this information as of this date and does not undertake any obligation to update any forward-looking statements.

Our Vision

Fulfilling the Promise of Antibodies to Improve Human Health

Abgenix

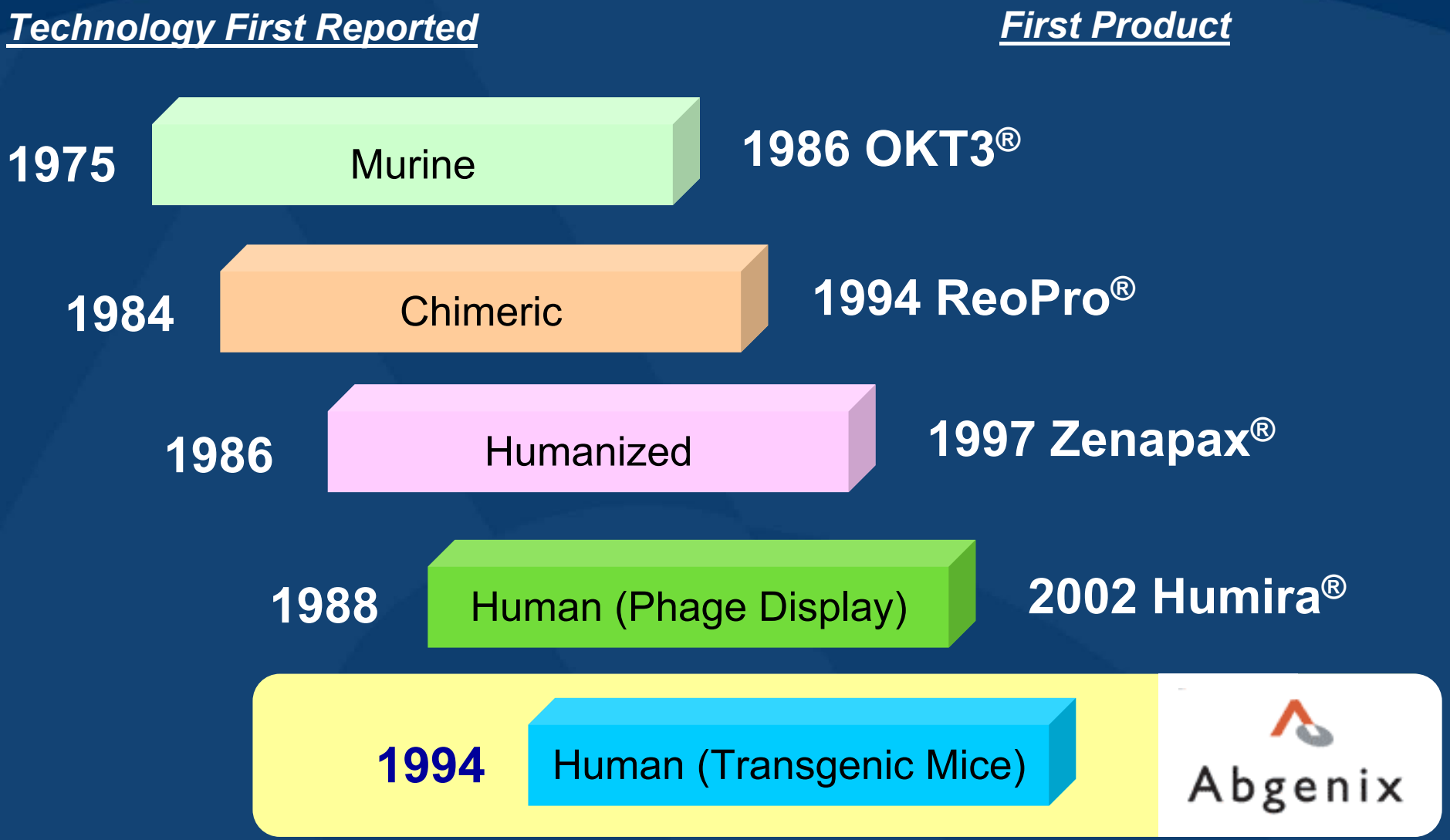
Antibodies are Fueling Industry Growth

Year	1995	1999	2004
No. of Rx mAbs FDA approved	2	8	17
Examples	OTK3® ReoPro®	Rituxan® Remicade®	Avastin® Humira®
mAb Product Sales in U.S.	<$200M	~$2B	~$10B

17 currently marketed mAbs → ~$20B peak potential estimated by industry analysts

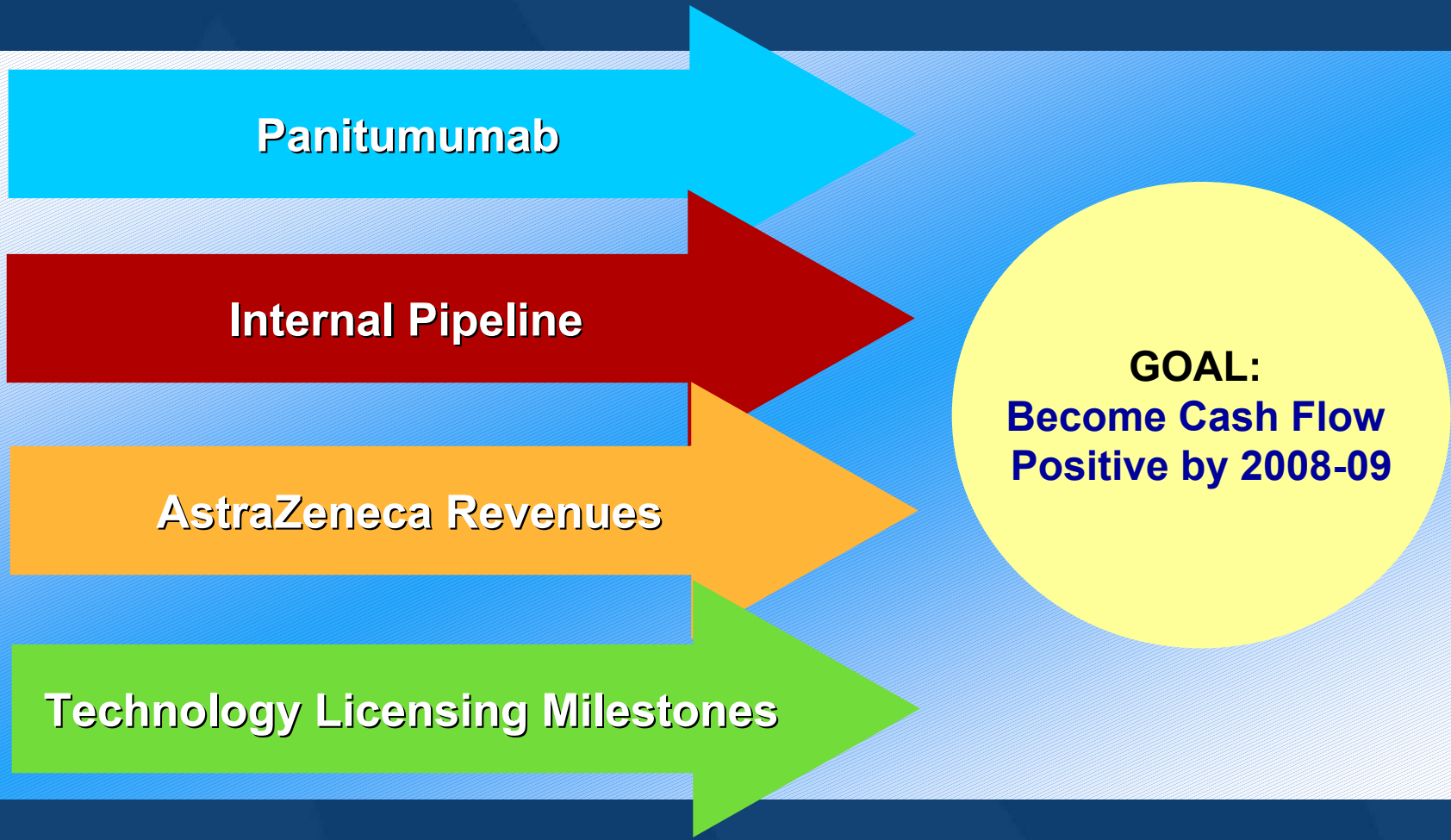
Abgenix

The Evolution of mAb Therapeutics

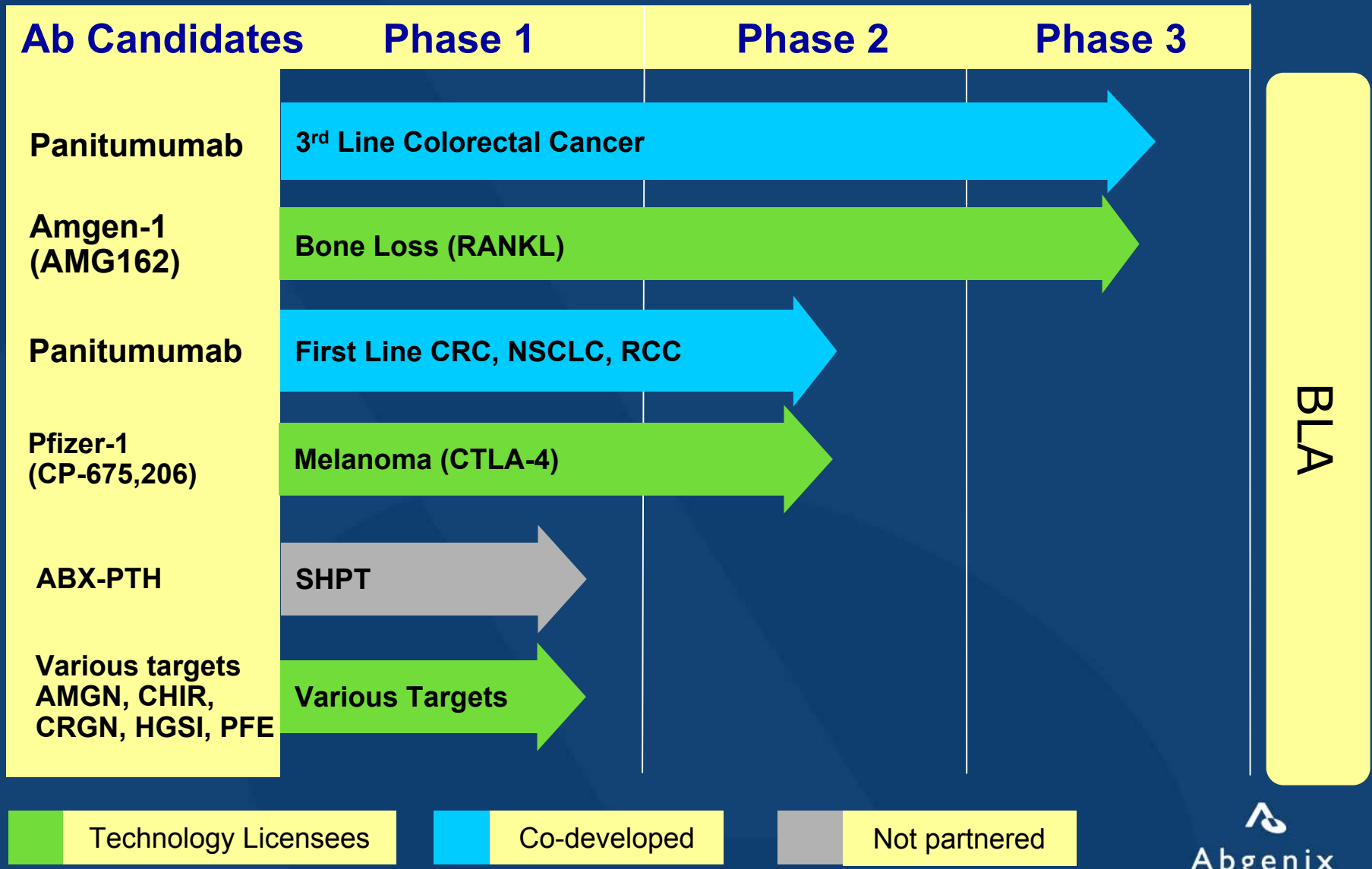


Source: Datamonitor, PubMed

Multiple Potential Revenue Sources Create Value and Growth Opportunity

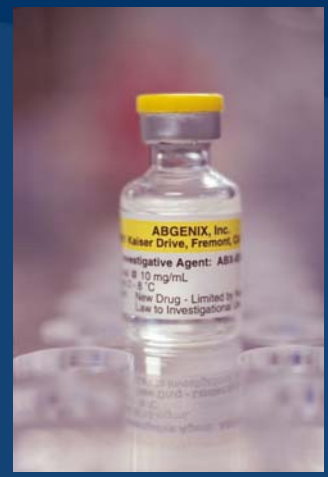


Abgenix Development Pipeline



Abgenix

Panitumumab: Lead Oncology Product Approaches BLA Filing



- First fully human EGFr inhibiting mAb
- Co-development deal with Amgen (50/50)
- Opportunity to co-promote
- ABGX to produce commercial scale material in support of BLA filing and potential launch
- Pivotal studies in 3rd line CRC ongoing in U.S. and Europe
  - Accrual in pivotal study (Ex-US) completed March 2005
- Obtained favorable FDA opinion re: acceptability of these studies for U.S. registration

Abgenix

Phase 2 Study in Advanced Colorectal Cancer Presented at ASCO 2005

- Updated phase 2 study results in second and third line CRC monotherapy (n = 148)
- Two cohorts:
  - Cohort A (> 10% of tumor cells EGFr 2 or 3+)
  - Cohort B (< 10% of tumor cells EGFr 2 or 3+)
- Failed therapy with a fluoropyrimidine (5FU) with or without leucovorin, and either irinotecan or oxaliplatin or both

Abgenix

Results Support Lead Indication of Phase 2 Study in Advanced CRC

- 9 percent overall response (central review of CT scans)
- Median duration of response: 18.1 weeks
- Median progression free survival: 13.6 weeks
- Median overall survival: 37.6 weeks
- No relation of EGFr expression intensity (IHC) and outcome
- Generally well tolerated
- To date no de novo HAHA formation observed in response to panitumumab

Abgenix

Panitumumab Development Pathway Leads Future Growth Potential

PRIMARY INDICATION

- 3rd line CRC monotherapy (Potential 2005 BLA filing)

EXPANSION OPPORTUNITIES

- CRC: Earlier phase treatment
- Lung: Combination and single agent

POTENTIAL FUTURE DEVELOPMENT

- Other solid tumors dependent on the EGFr pathway (e.g., head & neck)
- Combination with chemotherapy and targeted therapies

Abgenix

Oncology Alliance with AstraZeneca

Abgenix

- Human Antibody Technology
- Clinical Expertise
- Manufacturing

AstraZeneca

- Target Biology
- Worldwide Commercial Oncology Organization

36 targets in 3 years

Up to 18 co-development targets

Alliance Goals

Progress to date:

- 22 targets jointly selected
- Process development initiated

Abgenix

Financial Summary

- Strengthened Cash Position :
  - $400.7 million in cash and cash equivalents at end of Q1:05
- Decreasing Burn:
  - Anticipate total cash used in operating activities and capital to be approximately $105-$120 million in 2005
- 2005 Considerations:
  - Managing costs to offset increased panitumumab investment while advancing early stage candidates
  - Continued evaluation of fixed costs and expenses

Abgenix

Potential 2005 Milestones: Maintaining Momentum

H1

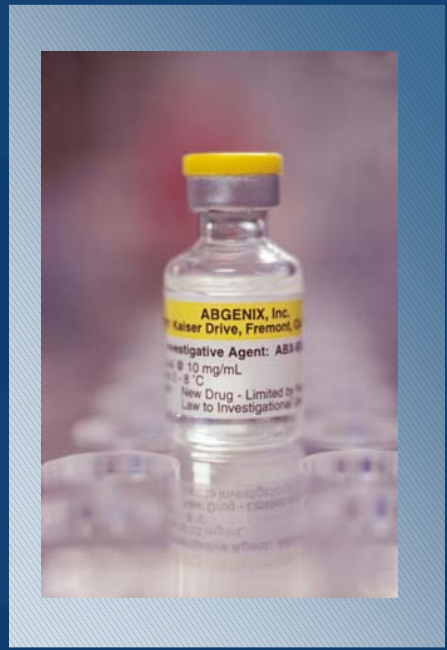
- ☑ Complete enrollment in pivotal study for panitumumab
- ☑ Release data at ASCO for panitumumab
- ☑ Further progress on oncology collaboration with AZ, 5 additional targets selected
- ❑ Launch ABX-PTH phase 1 multidose trial

H2

- ❑ Panitumumab BLA filing
- ❑ Phase 2 panitumumab results

Ongoing

- ❑ Proprietary pipeline progress
- ❑ Partner progress in the clinic



Abgenix

Abgenix

DELIVERING ON THE PROMISE OF ANTIBODIES