ENTREMED

Stockholders' Meeting
June 9, 2011

NASDAQ: ENMD

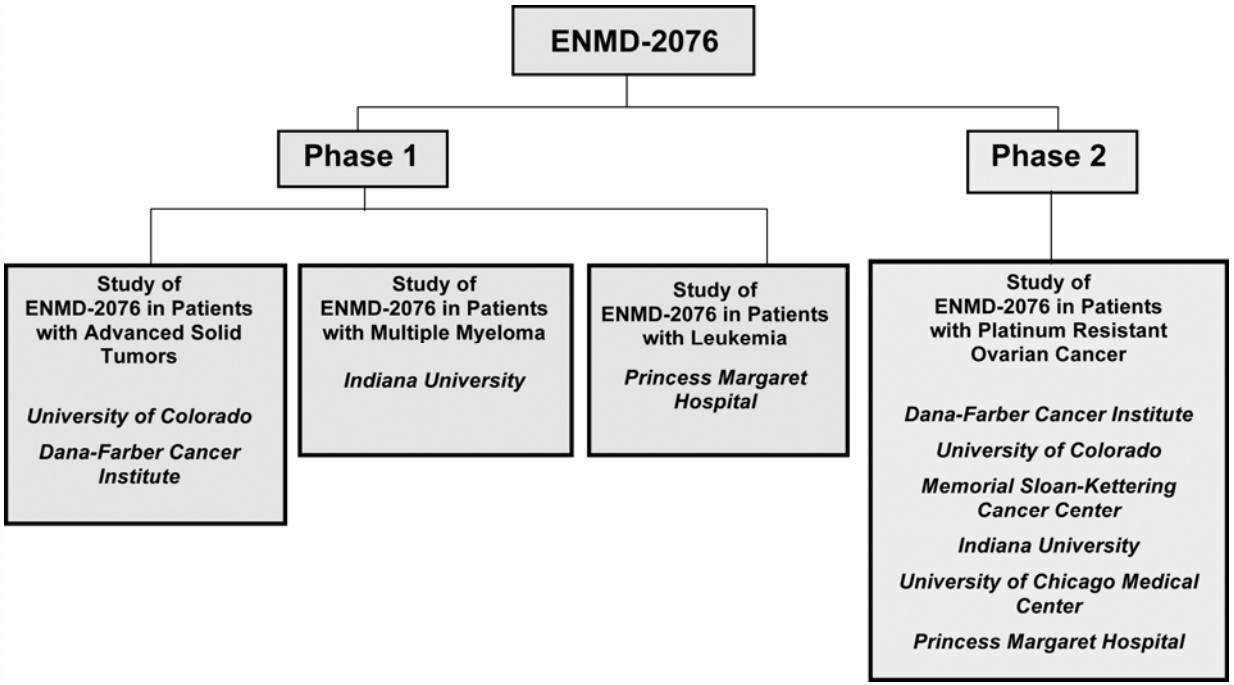
Presentation By
Michael M. Tarnow, Executive Chairman

Forward-Looking Statements

I would like to remind everyone that statements in this presentation that are not descriptions of historical facts are forward-looking and subject to risk and uncertainties. Actual results may differ materially from those currently anticipated due to a number of factors, including risks relating to additional financing, early-stage product development, clinical trials, and those set forth in the Company's Securities and Exchange Commission filings.

Overview

EntreMed, Inc. is a clinical-stage pharmaceutical company focused on developing and aggressively pursuing opportunities for our primary program, ENMD-2076. ENMD-2076 is an Aurora A and angiogenic kinase inhibitor for the treatment of cancer. Phase 1 studies in advanced solid tumors and leukemia are complete and a Phase 1 study in multiple myeloma as well as a multi-center Phase 2 study in ovarian cancer patients are underway.



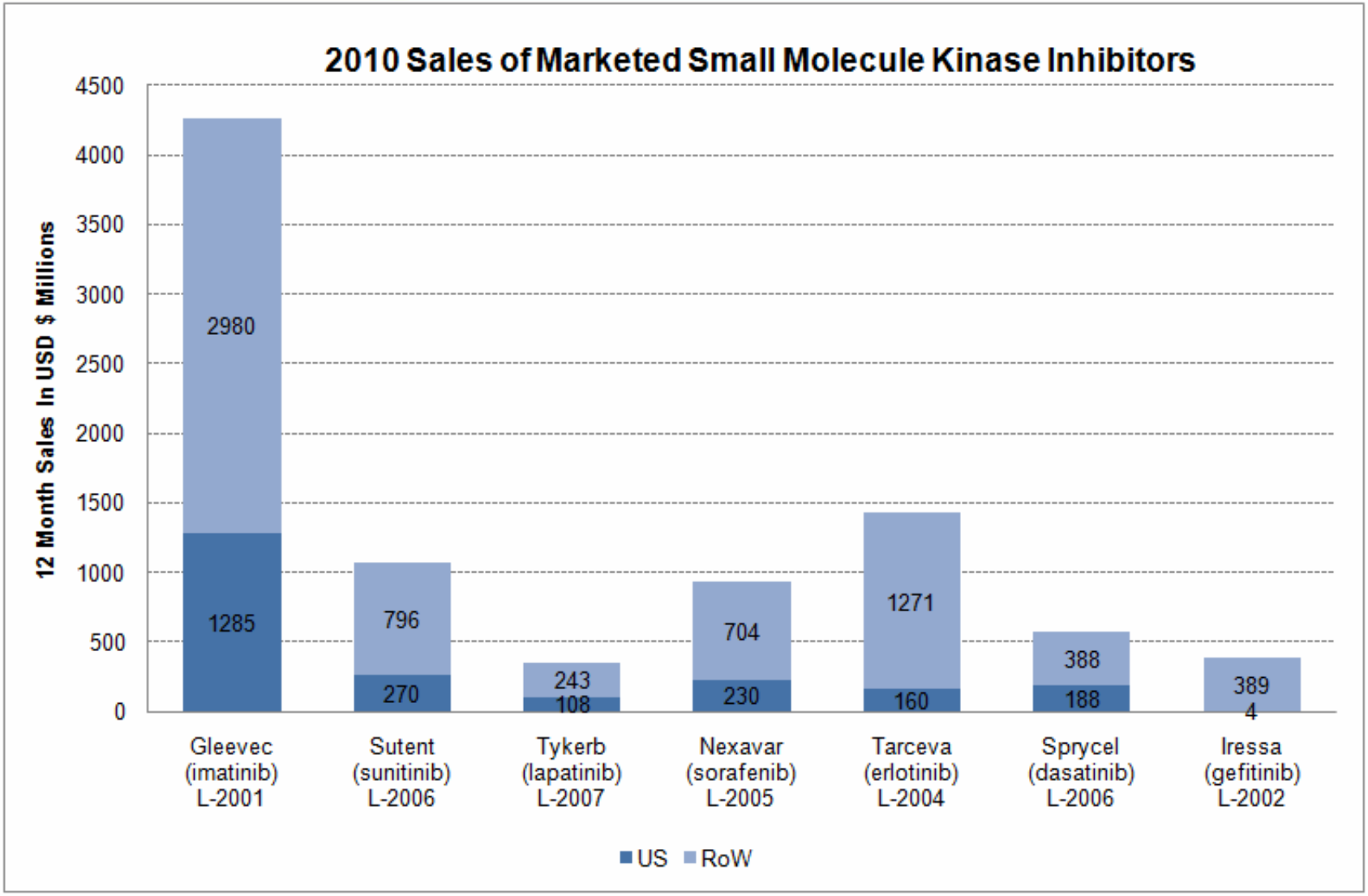
Accomplishments 2010 - 2011

- **Completed Phase 1 studies with ENMD-2076 in advanced solid tumors and leukemia; enrollment continues for Phase 1 study in multiple myeloma**
- **Initiated multi-center Phase 2 study with ENMD-2076 in patients with platinum-resistant ovarian cancer**
- **Completed enrollment for ENMD-2076 Phase 2 study in ovarian cancer in 1Q11**
  - Phase 2 results presented at ASCO 2011
- **Entered into rights agreement for development and commercialization of ENMD-2076 in China**

ENMD-2076: Significant Clinical and Market Potential

- **Significant therapeutic potential in a broad range of tumor types**
- **Strong intellectual property rights**
- **Orphan drug designation**
  - Ovarian Cancer
  - Multiple Myeloma
  - Acute Myeloid Leukemia (AML)

Substantial Commercial Potential: 2010 Sales of Marketed Small Molecule Kinase Inhibitors



Source: MedTrack, company sources

ENMD-2076 Phase 1 Study in Advanced Solid Tumors

Study Complete

- Demonstrated clinical benefit in ovarian, hepatocellular, breast, renal cell, colorectal cancer and melanoma
  - Reductions in tumor volume and tumor markers
  - Improvement in cancer related symptoms
- Oral, daily dosing
- Well-tolerated
- Data published in *Clinical Cancer Research*, 17(4) Feb 15, 2011

Additional Phase I Studies in Hematological Cancers

Acute Myeloid Leukemia (AML) – Complete

- Clinical data for 27 patients presented at American Society of Hematology (ASH), December 2010
  - ENMD-2076 associated with anti-leukemia activity
    - **Reductions in bone marrow blast count**
    - **1 CRi (complete remission with incomplete hematological recovery); 3 patients achieved morphologic leukemia-free state (MLFS)**

Multiple Myeloma – Enrolling

- Clinical data for 10 patients presented at American Society of Hematology (ASH), December 2010
  - 9 evaluable patients; 3 stable disease; 1 partial response
- Oral, daily dosing
- Well-tolerated
- Pharmacodynamic studies ongoing

ENMD-2076 Phase 2 Study in Ovarian Cancer

- Ovarian cancer selected as initial Phase 2 indication based on mechanism of action, preclinical data, and Phase 1 solid tumor study results
- Initiated multi-center Phase 2 study in April 2010
  - Six sites participated: Dana-Farber/Harvard Cancer Center; Memorial Sloan-Kettering Cancer Center; University of Chicago Medical Center; Indiana University Melvin and Bren Simon Cancer Center; Princess Margaret Hospital; and University of Colorado
- Enrollment Complete 1Q11
  - 64 patients enrolled
- Primary Endpoint
  - Progression-Free Survival (PFS) rate at 6 months

ENMD-2076 Phase 2 Study in Ovarian Cancer – Results Presented at ASCO 2011

- Enrollment complete – 64 patients
  - 57 patients evaluable for response
- Primary endpoint – Progression-Free Survival (PFS) rate at 6 months
  - Six-month progression free survival rate of 19% to date
- Of the 57 patients
  - 4 patients achieved a partial response
  - 30 patients achieved stable disease as measured by RECIST v1.1
- Median survival has not yet been reached
- Side effect profile
  - Consistent with activity against ENMD-2076 targets
    - In particular, VEGFR2 and Aurora A
- Studies to evaluate potential markers of ENMD-2076 on-going

ENMD-2076 Next

- Final data on the primary endpoint for Phase 2 ovarian cancer study expected 3Q11
- Selected Value Therapeutics (SVT) Announcement
  - Exercised option
  - Commercial development in China
- Additional Phase 2 studies
  - Ovarian cancer; likely in combination with other compounds
- Other indications
  - Breast, hepatocellular, neuroendocrine, and colorectal cancers

2011 Issues and Activities

- Further development of ENMD-2076
- Partnership discussions
- Secure funding

Financial Position: Year-End 2010

Twelve Months Ended December 31,

	2010	2009
Total revenues	$ 3,693,167	$ 5,284,058
Research & development	4,829,943	7,901,522
General & administrative	3,397,866	4,104,287
Acquired in-process R&D	3,000,000	-
Net Loss	(8,101,115)	(8,216,378)
Net loss per share attributable to common shareholders	$ (0.94)	$ (1.16)
Weighted avg. number of shares outstanding (basic)	9,678,924	7,977,979
Cash & short term investments	$ 4,911,788	$ 6,366,253

1Q11 vs. 1Q10: Carefully Managing Financial Resources

	Three Months Ended March 31,	
	2011	2010
Research & development	$1,398,274	$ 843,953
General & administrative	$1,253,105	$1,051,225
Net Loss	(2,596,379)	(2,126,144)
Net loss per share attributable to common shareholders	$ (0.25)	$ (0.28)
Cash & short term investments	$4,828,893	$9,691,834

Questions & Answers