**UNITED STATES**
**SECURITIES AND EXCHANGE COMMISSION**
**Washington, D.C. 20549**

# FORM 8-K

**CURRENT REPORT**
**Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

**Date of Report (Date of earliest event reported): January 11, 2010**

# AMICUS THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

| **Delaware** | **001-33497** | **71-0869350** |
|---|---|---|
| (State or other Jurisdiction of Incorporation) | (Commission File Number) | (IRS Employer Identification No.) |

| **6 Cedar Brook Drive, Cranbury, NJ** | **08512** |
|---|---|
| (Address of Principal Executive Offices) | (Zip Code) |

Registrant's telephone number, including area code: **(609) 662-2000**

(Former name or former address if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

**Item 8.01. Other Events.**

On January 11, 2010, John F. Crowley, President and Chief Executive Officer of Amicus Therapeutics, Inc. (the "Company"), participated in the 28th Annual J.P. Morgan Healthcare Conference (the "Conference"). A copy of the presentation given by Mr. Crowley at the Conference is attached to this Current Report as Exhibit 99.1. On the same date, the Company filed a press release, a copy of which is attached to this Current Report as Exhibit 99.2.

**Item 9.01. Financial Statements and Exhibits.**

(d) Exhibits: The Exhibit Index annexed hereto is incorporated herein by reference.

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Amicus Therapeutics, Inc.

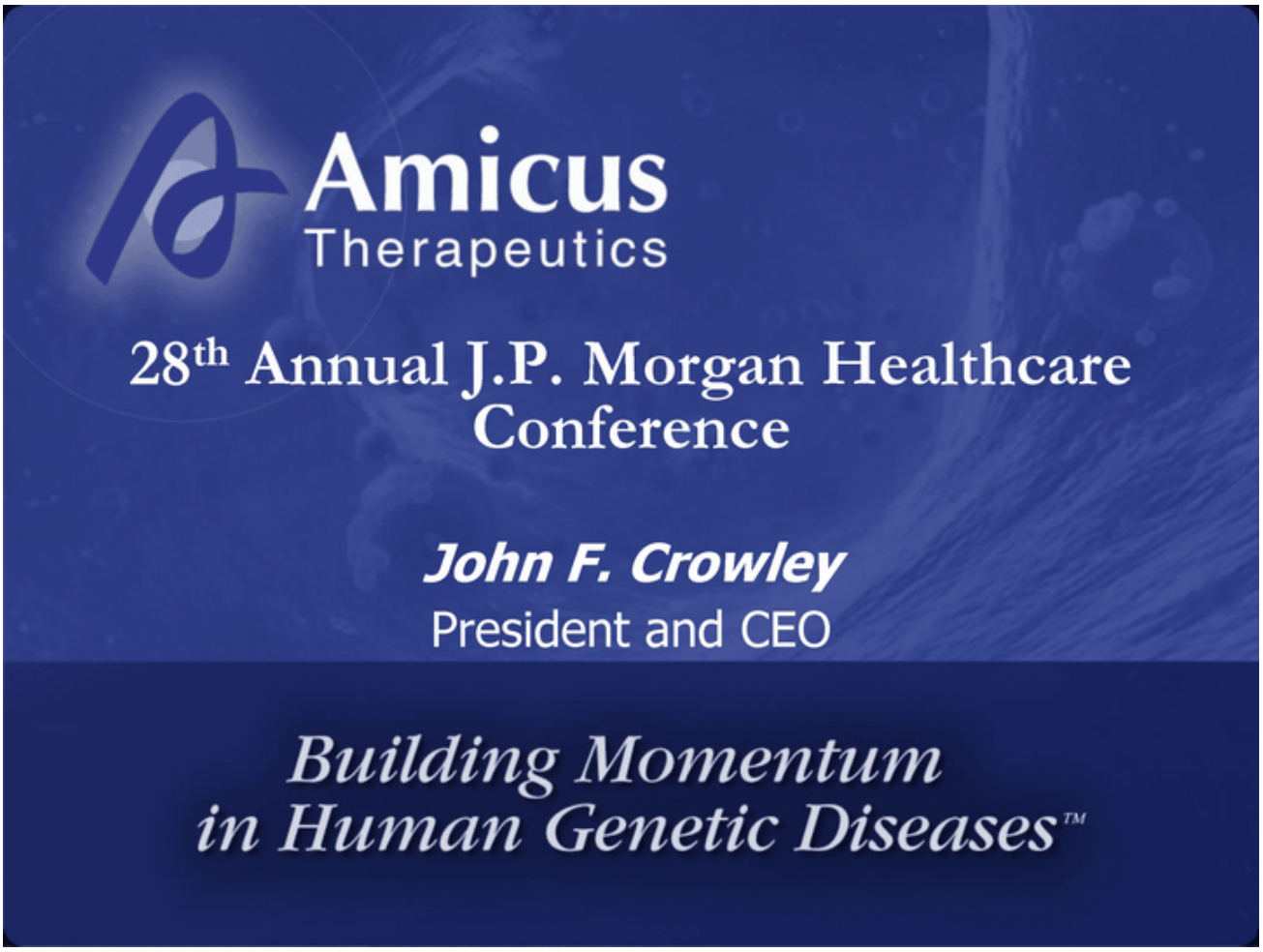
Date: January 11, 2010

By: /s/ Geoffrey P. Gilmore
Geoffrey P. Gilmore
Senior Vice President and General Counsel

**EXHIBIT INDEX**

| Exhibit No. | Description |
|---|---|
| 99.1 | Presentation Materials |
| 99.2 | Press Release dated January 11, 2010 |

Exhibit 99.1


Amicus
Therapeutics
28th Annual J.P. Morgan Healthcare Conference
John F. Crowley
President and CEO
Building Momentum in Human Genetic Diseases™

# Safe Harbor



**This presentation contains certain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 relating to the business, operations and financial condition of Amicus, including but not limited to preclinical and clinical development of Amicus' candidate drug products, the timing and reporting of results from preclinical studies and clinical trials evaluating Amicus' candidate drug products, and the projected cash position for the Company. Words such as, but not limited to, "look forward to," "believe," "expect," "anticipate," "estimate," "intend," "likely," "should" and "could," and similar expressions or words, identify forward-looking statements. Although Amicus believes the expectations reflected in such forward-looking statements are based upon reasonable assumptions, there can be no assurance that its expectations will be realized. Actual results could differ materially from those projected in Amicus' forward looking statements due to numerous known and unknown risks and uncertainties, including the "Risk Factors" described in our Annual Report on Form 10-K for the year ended December 31, 2008, and our other public filings with the Securities and Exchange Commission. Amicus does not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any such statement is made, or to reflect the occurrence of unanticipated events.**

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# Amicus Therapeutics in 2010
## Key Strategic Priorities



- Phase 3 program: Amigal™ for Fabry disease

GOALS
- Complete enrollment in US registration study (011) Q4 2010
- Commence European registration study (012) before YE 2010

- Chaperone-ERT Combo therapy

GOAL
- Initiate Amigal-ERT Phase 2 trial in 2010

- Chaperone development for diseases of neurodegeneration

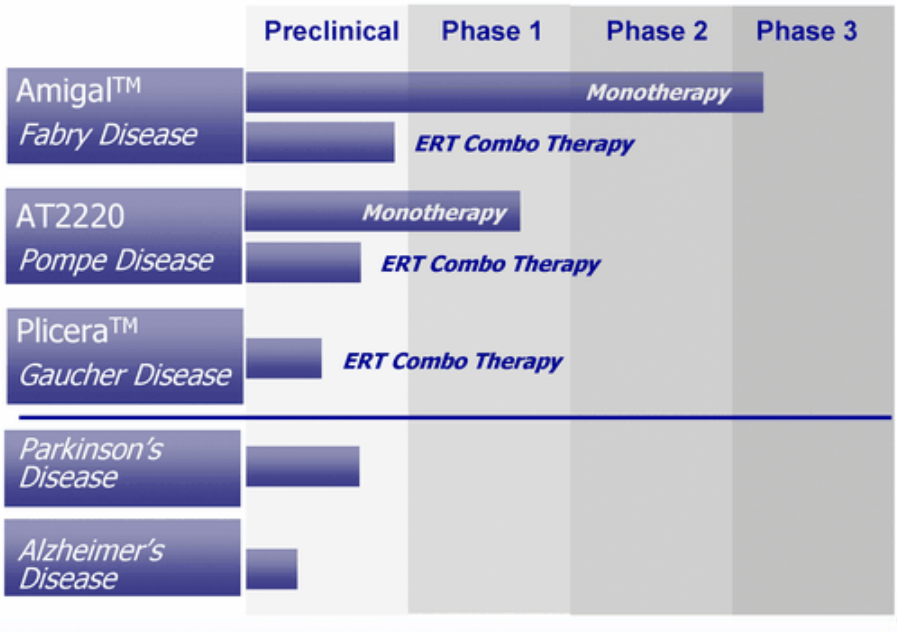
GOALS
- Complete advanced preclinical POC studies in Parkinson's disease
- Complete initial POC studies in Alzheimer's disease

Amicus Therapeutics

# Pipeline
## Leveraging Versatility of Technology Platform



Advancing Amigal Phase 3 program and other significant opportunities

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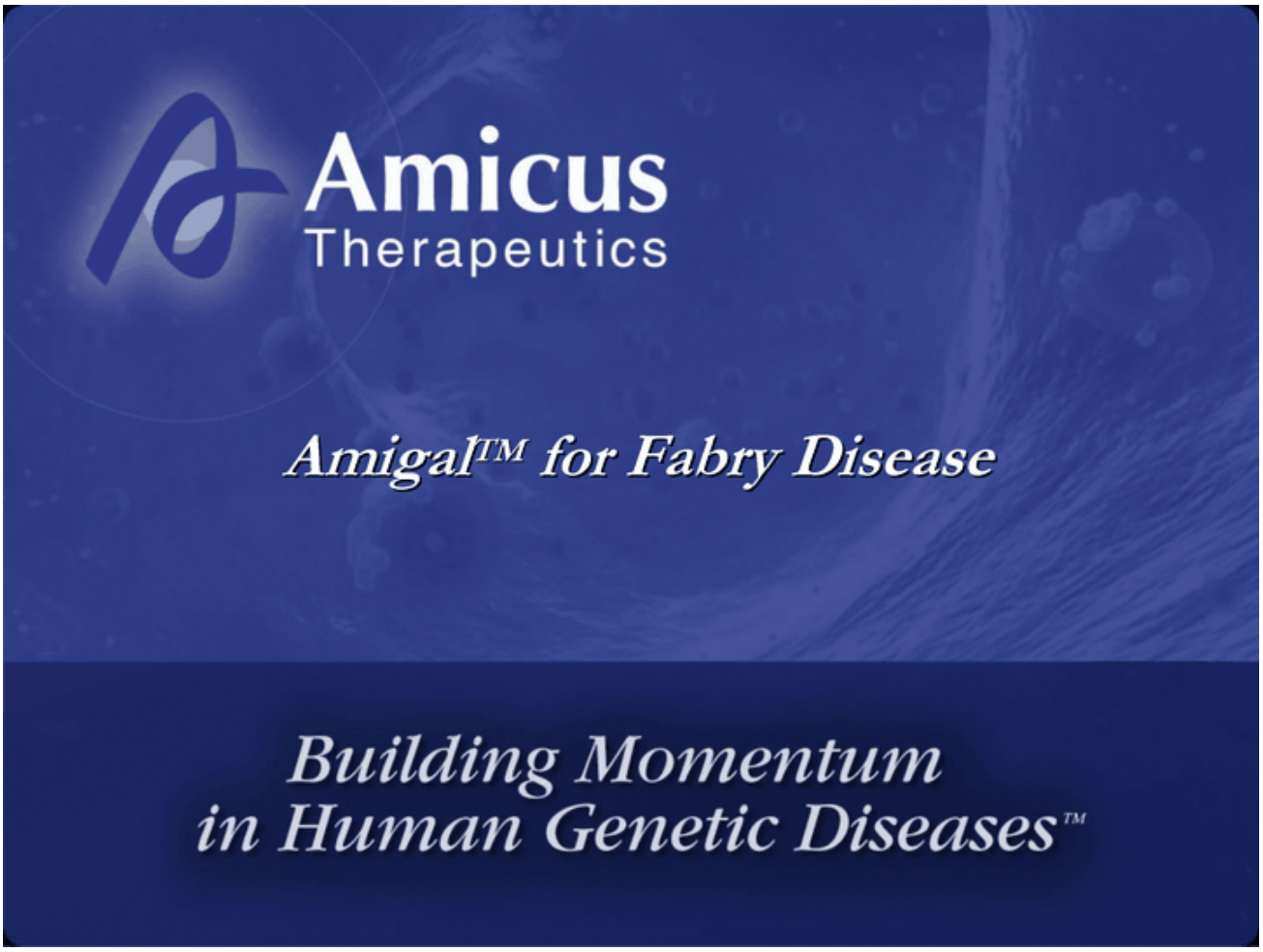
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Amigal™ for Fabry Disease
Building Momentum
in Human Genetic Diseases™

# Amigal for Fabry Disease



**Amigal Phase 3 program is our number one priority**

- Global Phase 3 study to support US registration ongoing
  - Patient enrollment expected to be completed Q4 2010
  - Results expected mid-2011
- Confident in probability of success
  - Positive Phase 2 and Phase 2 extension study data
  - Appropriate Phase 3 entry criteria
  - Clear path to registration through agreements with FDA and EMEA
- Established market opportunity
  - First oral treatment option for Fabry
  - Significant upside potential

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# Amigal for Fabry Disease

## Global Phase 3 Study to Support US Registration Ongoing




### Clear path to registration

- Accelerated approval
- 6 month study: Amigal versus placebo
- Surrogate primary endpoint of the change in kidney interstitial capillary GL-3

### Foundation for success

- Eligibility criteria will enrich for subjects with responsive mutations and elevated kidney GL-3
- Positive Phase 2 and Phase 2 extension study data

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# Amigal for Fabry Disease



**Positive Phase 2 safety and efficacy results with more than 60 patient years of data support move into Phase 3**

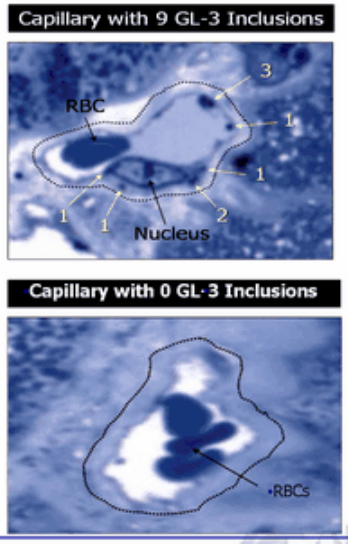
**Phase 2 Summary**

- 26 male and female subjects treated for 12-24 wks
- AT1001 was generally well tolerated
- Treatment increased levels of $\alpha$-Gal A
- Treatment decreased levels of kidney GL-3

**Phase 2 Extension Summary**

- 22 subjects continue on long-term extension study
  - 14 subjects on Amigal over 2 years
  - 8 subjects on Amigal over 3 years
- Trend of stable renal function by GFR
- Trend of decreased proteinuria observed

Interstitial Capillaries of the Kidney




*Preliminary Data*

# Amigal for Fabry Disease

## Phase 2 Data Support Phase 3 Development



**Phase 2 data in subset of subjects on the Phase 3 dose and regimen were encouraging across all key parameters**

Five male subjects on 150 mg QOD

↓

Enzyme levels increased 5 to 41-fold in WBCs and kidney

↓

Mean 63% reduction of GL-3 in kidney interstitial capillaries and mean 46% in urine

↓

Stable renal function by GFR and reductions in proteinuria

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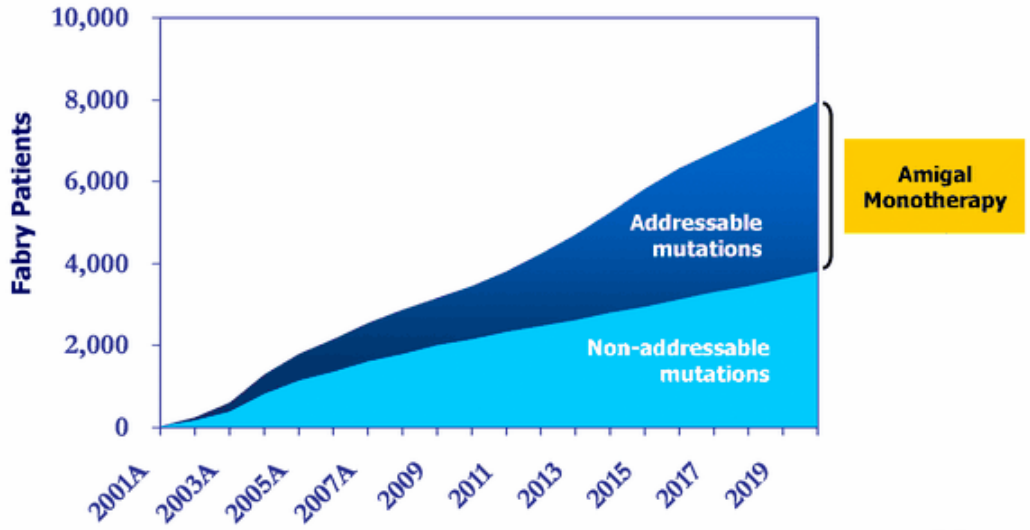
*Note: Preliminary 48 week data from Fab-202 and Fab-203; 1 subject completed only 12 weeks*

# Amigal for Fabry Disease

## Significant Commercial Opportunity



Fabry Market (2008) is $670MM+ with 18%+ CAGR




(1) Sales and CAGR based on 2008 company 10Ks; (2) Future market growth extrapolated from JP Morgan, AG Edwards, SG Cowen and Credit Suisse projections through 2010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Chaperone-ERT Combo Therapy
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# Chaperone-ERT Combo Therapy
## Expansion of Chaperone Technology



**Preclinical data suggest Pharmacological Chaperones have the potential to significantly enhance ERT safety and efficacy**

- Reduce loss of activity in the circulation
- Increase effectiveness of ERT
- Improve safety of ERT
- Decrease quantity of ERT with reduced infusion time and costs

**Potentially applicable to all ERTs and other recombinant proteins**

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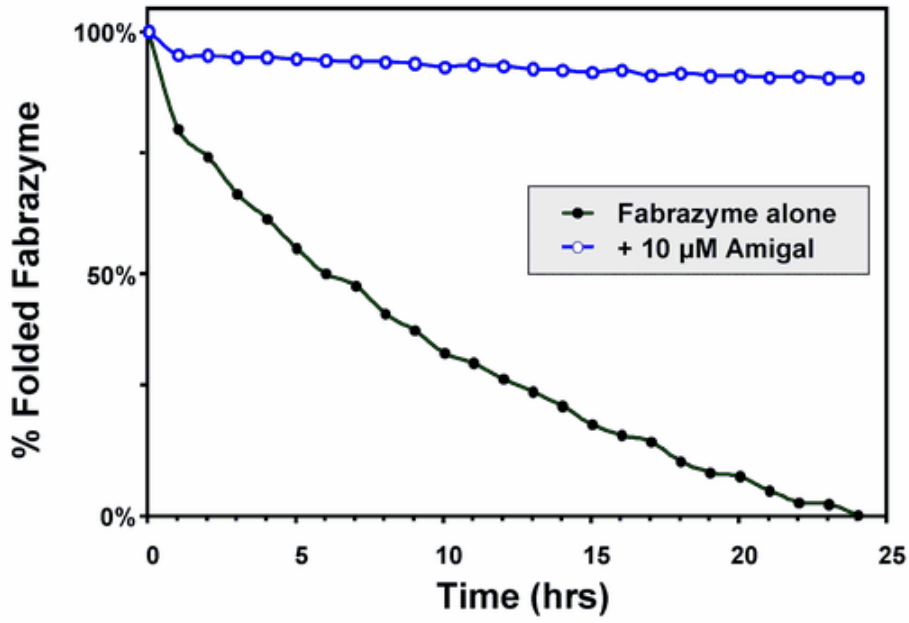
# Amigal Increases Fabrazyme® Stability



## Denaturation Time Course of Fabrazyme at pH=7.4




Percent folded rhGLA (Fabrazyme) ± 10 µM AT1001 at 37 °C

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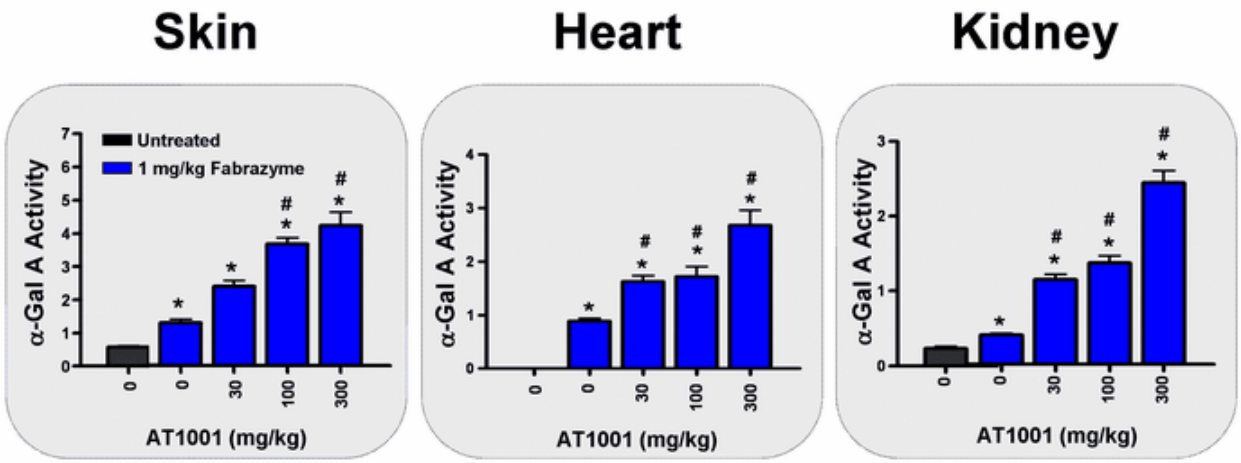
# Amigal Increases Fabrazyme Tissue Uptake



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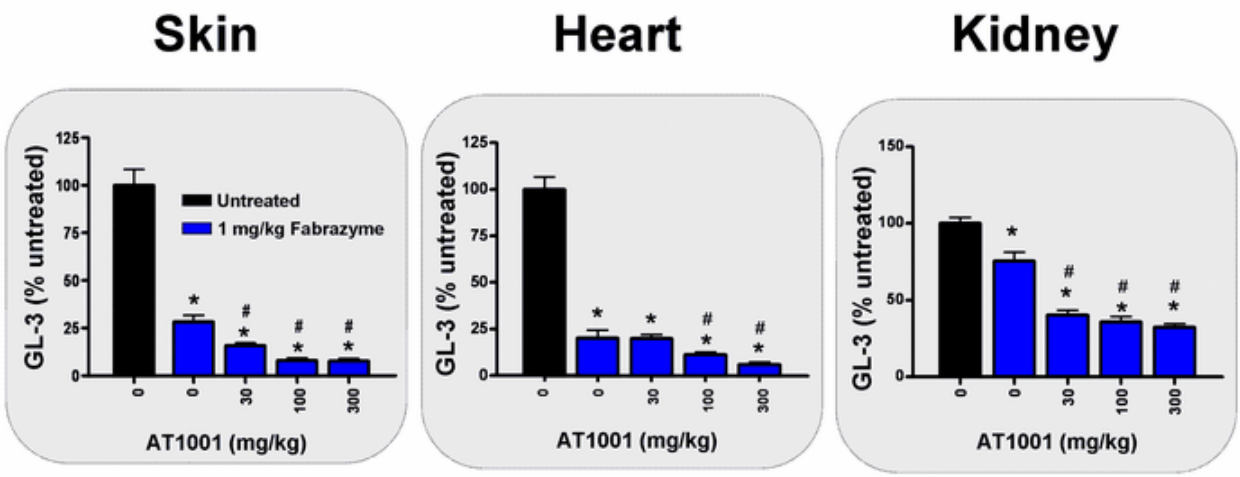
# Amigal Increases GL-3 Clearance by Fabrazyme



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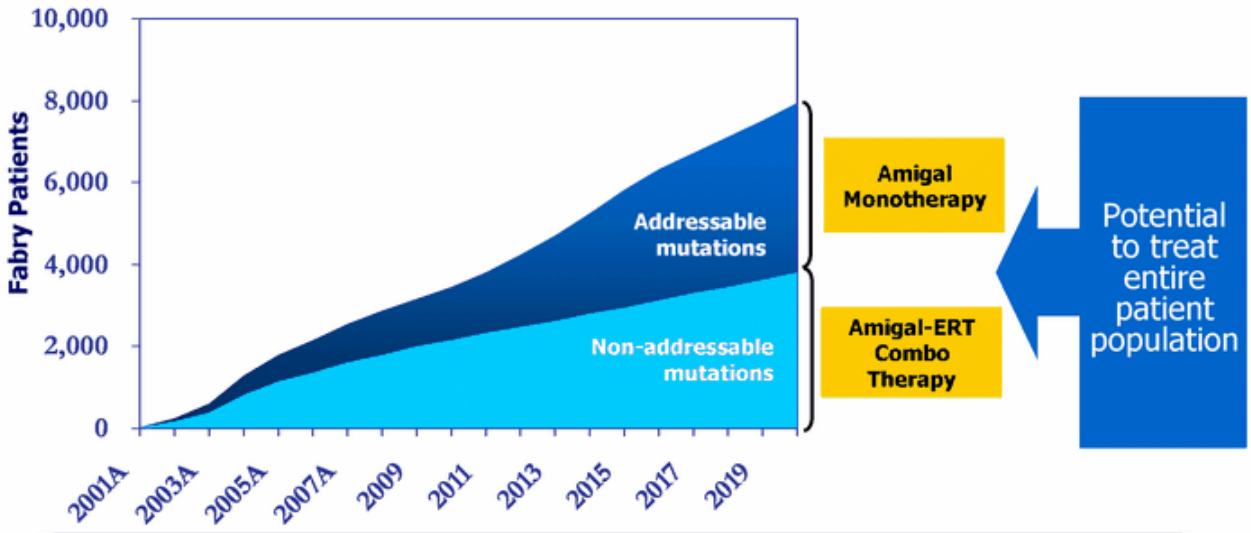
# Amigal for Fabry Disease

## Treatment Options for all Patients



Fabry Market (2008) is $670MM+ with 18%+ CAGR




PCs offer the potential to address a sizeable late-onset Fabry population

(1) Sales and CAGR based on 2008 company 10Ks; (2) Future market growth extrapolated from JP Morgan, AG Edwards, SG Cowen and Credit Suisse projections through 2010

# Chaperone-ERT Combo Therapy Next Steps



**Preclinical proof-of-concept established in Fabry and Pompe**

- Additional proof-of-concept data to be presented at WORLD LSD Conference in February 2010
- Plan to initiate Phase 2 clinical study with Amigal and ERT in 2010
- Evaluating options to advance programs in Pompe disease and Gaucher disease

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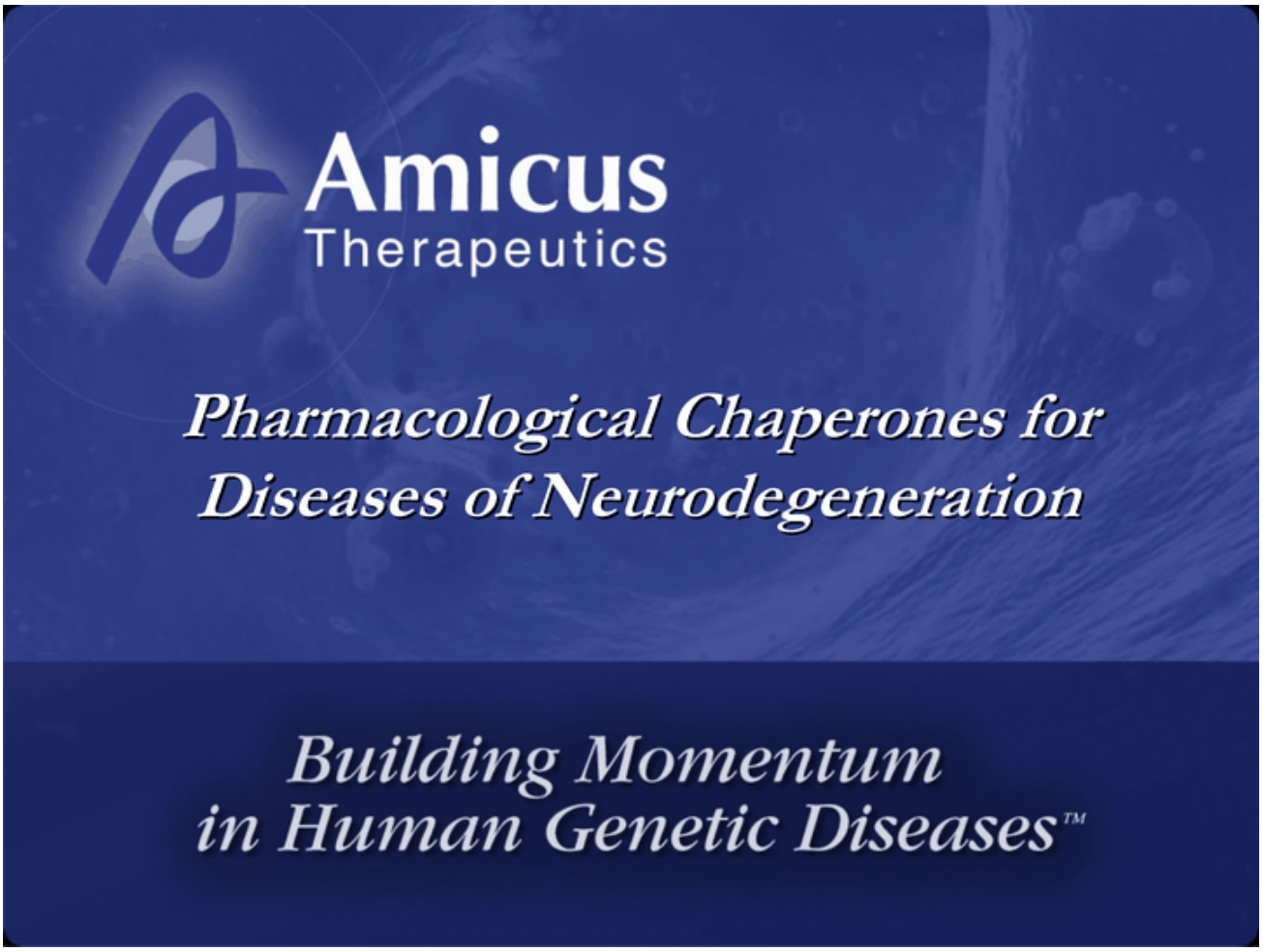
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# Parkinson's Disease & Gaucher Disease
## An Established Genetic Link



Mutations in the gene (*GBA*) now considered most common genetic risk factor for Parkinson's disease

Multicenter Analysis of Glucocerebrosidase Mutations in Parkinson's Disease

- Gaucher carriers have an estimated 5-fold increased risk for Parkinson's disease
- Multiple independent studies in different populations

THE MICHAEL J. FOX FOUNDATION FOR PARKINSON'S RESEARCH

*The New England Journal of Medicine*
N Engl J Med 2009;361:1651-61

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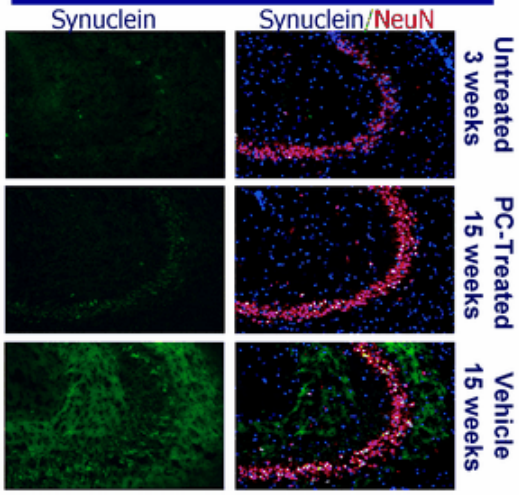
# Significant Advancements in Parkinson's
## Increasing GCase Leads to Synuclein Reduction

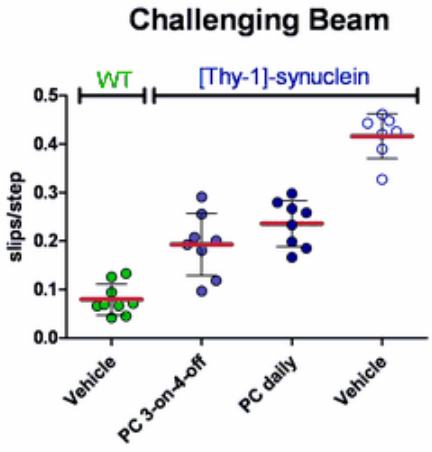


Established proof-of-concept in Parkinson's animal models

### Prevention of synuclein in accumulation in the brain




### Improvements in behavioral characteristics and motor function

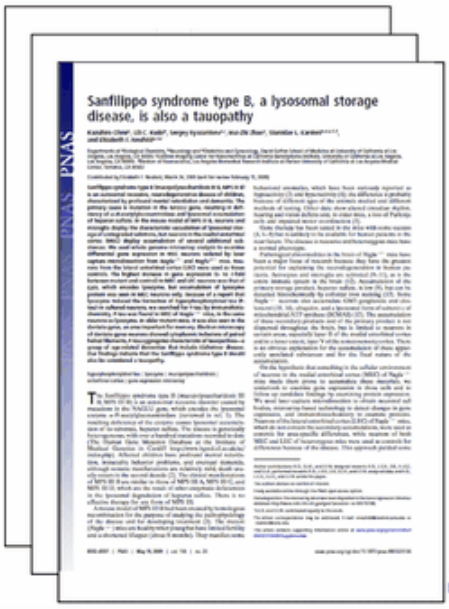



Lead molecules selected with strong IP

# Alzheimer's Disease Program
## Pharmacological Chaperone Approach



**Apparent link between various lysosomal enzymes and accumulation of β-amyloid and P-Tau deposits in the brain**



Sanfilippo syndrome type B, a lysosomal storage disease, is also a tauopathy

PNAS

- β-amyloid and P-Tau are hallmarks of Alzheimer's disease
- Potential to use pharmacological chaperones to increase activity of target enzymes decrease β-amyloid and P-tau

**Next Steps:**

- Complete initial POC studies in 2010

*Proceedings of the National Academy of Science*
Proc Natl Acad Sci USA 2009;106:8332-7

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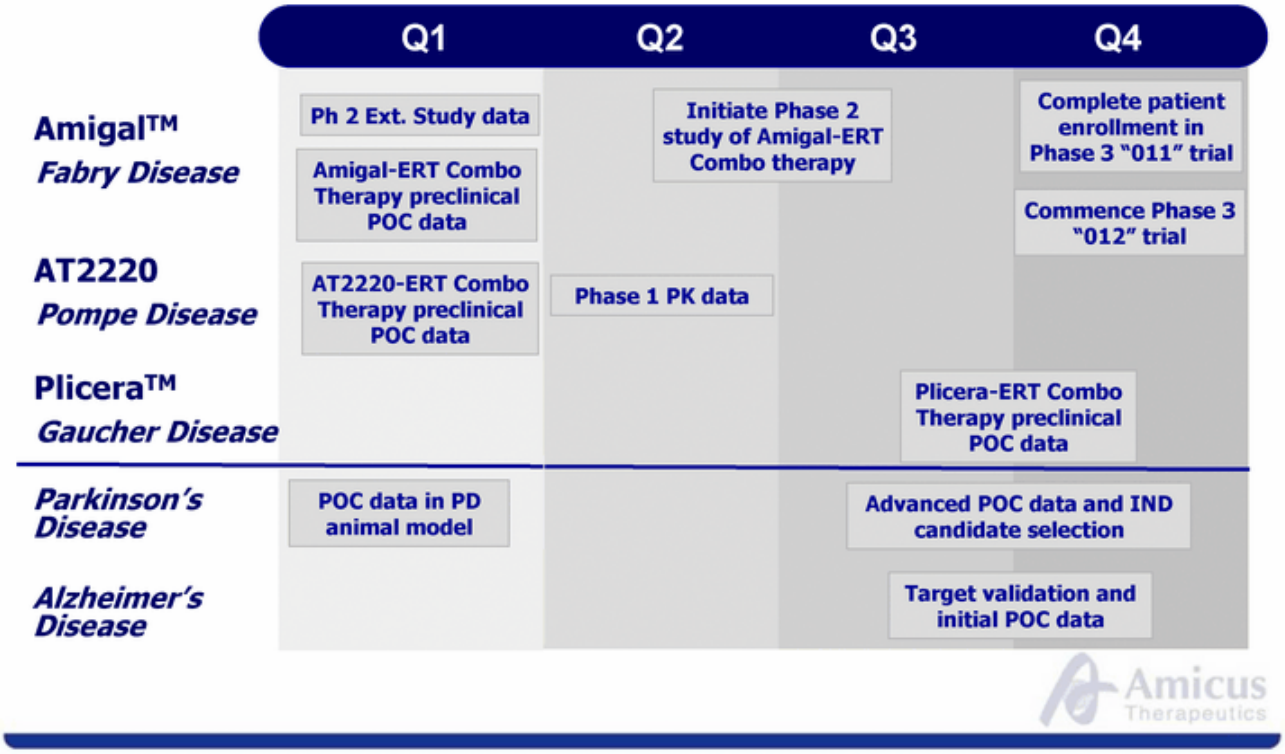
# 2010 Key Milestones





# 2010 Financial Strategy



Financial strength and discipline to advance key strategic priorities

- Expected cash balance YE 2009 ~$78M
- 2010 projected cash burn ~$40-50M
- Current cash projected to last into 2H 2011
- Evaluating all opportunities in 2010 to build on financial strength, including possible partnerships:
  - Fabry Ex-US
  - Chaperone-ERT Combo programs
  - Parkinson's disease
  - Alzheimer's disease

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# Amicus Therapeutics in 2010
## Key Strategic Priorities



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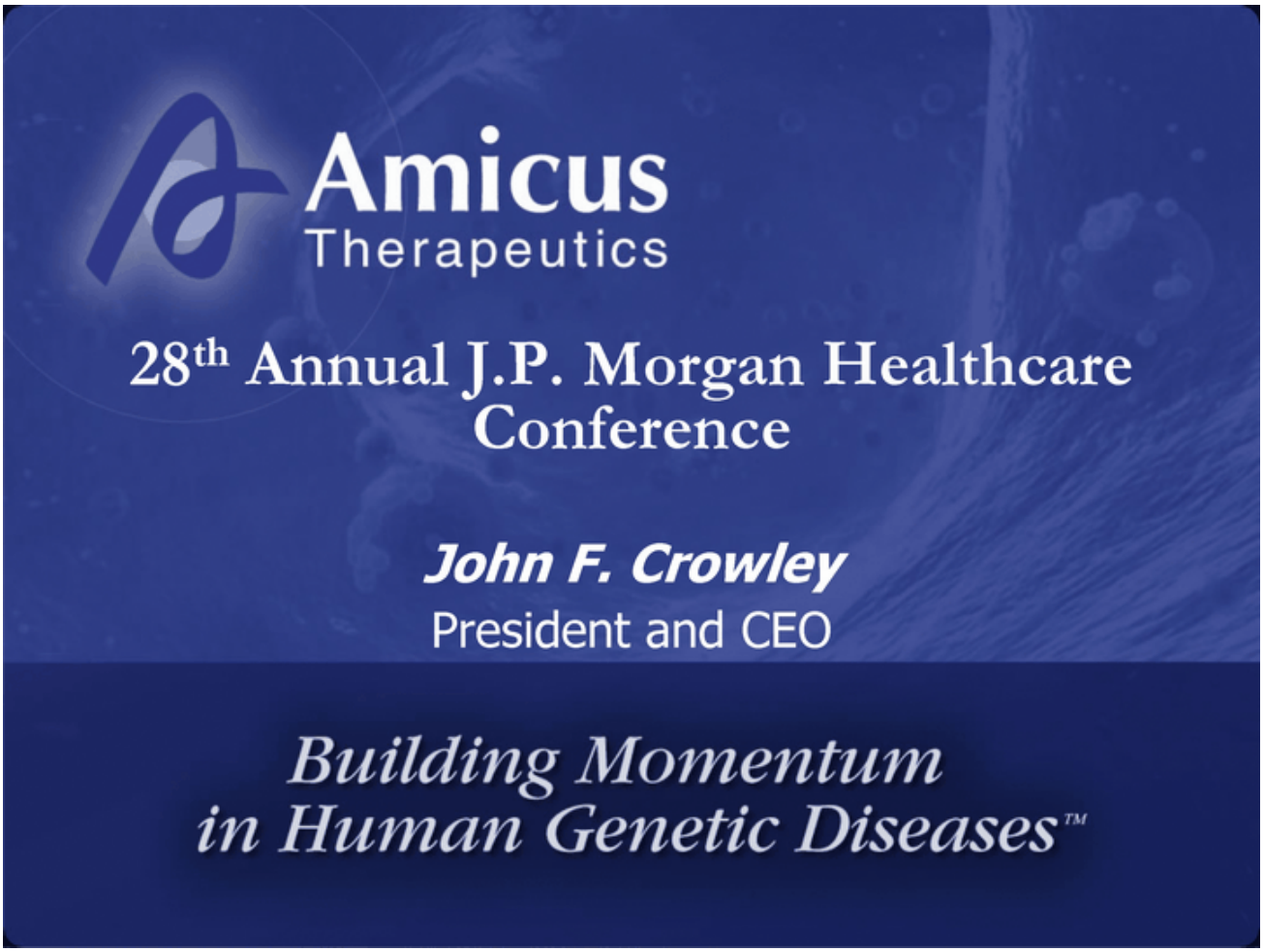
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**Exhibit 99.2**

**Amicus Therapeutics Outlines 2010 Strategic Priorities and Continued Progress with Product Pipeline**

**Company to focus on advancing Amigal™ Phase 3 Program in Fabry disease**

**Cranbury, NJ, January 11, 2010** — Amicus Therapeutics (NASDAQ: FOLD) today outlined the Company's three key strategic priorities and presented a corporate outlook for 2010 at the 28th Annual J.P. Morgan Healthcare Conference.

"In 2010 our strategic priorities are clear and we remain steadfast in executing our business goals. We are committed to focusing our resources on three value-creating centers within Amicus. Advancing our global Amigal Phase 3 program is our number one priority. We expect to make significant progress with Amigal by fully enrolling our 011 study and expect to commence the 012 Phase 3 study to support approval in the EU. We plan to balance the execution of this global, late-stage clinical program in Fabry disease with significant progress in our chaperone-ERT combination programs and our preclinical programs in Parkinson's disease and Alzheimer's disease," said John F. Crowley, Amicus' President and CEO.

**Amigal (migalastat hydrochloride) for the treatment of Fabry Disease**

The Phase 3 study intended to support approval in the United States (Study 011) commenced in the second quarter of 2009 and treatment of the first patient began in the fourth quarter of 2009. The Company expects to complete enrollment by the end of 2010 and to have results from this study in mid-2011. The 011 study is a 6-month, randomized, double-blind trial comparing Amigal to placebo in approximately 60 subjects. The surrogate primary endpoint is the change in the amount of kidney interstitial capillary GL-3. Subjects to be enrolled are Fabry patients who have never received enzyme replacement therapy (ERT), or who have not received ERT for at least 6 months, and who have a mutation responsive to Amigal. The Company intends to seek Accelerated Approval for Amigal according to Subpart H regulations. The key elements of this study design and regulatory path were agreed to with the U.S. Food and Drug Administration (FDA) in the second quarter of 2009.

Amicus previously reported that it completed a series of discussions with the European Medicines Agency (EMEA) regarding the clinical study required for Amigal registration in Europe. The Company today reported that it expects to commence this Phase 3 trial (Study 012) before year end. The 012 study will be an 18-month, randomized, open-label study comparing Amigal versus ERT in approximately 60 subjects. The primary endpoint will be renal function as measured by glomerular filtration rate (GFR). Subjects to be enrolled will be Fabry patients who are receiving ERT and have a mutation responsive to Amigal. Patients will be randomized to switch to Amigal or to continue receiving ERT.

Twenty-two of the 26 subjects enrolled in the original Phase 2 studies continue to receive treatment in an ongoing extension study designed to evaluate the long-term safety and efficacy of Amigal. Fourteen subjects have been on treatment for at least 2 years and eight subjects have been on treatment for more than 3 years. Preliminary data from this study suggest that Amigal continues to be generally well-tolerated. In addition, in the subset of these patients that meet the Phase 3 study entry criteria and have only received the Phase 3 dose and regimen, results suggest stabilization of renal function as measured by GFR and trends of improvement in proteinuria. The Company will provide an update from this study in the first quarter of 2010.

**Chaperone-ERT Combination Therapy**

Amicus continues to advance its program evaluating the use of pharmacological chaperones in combination with ERT as an expansion of the chaperone technology platform. Amicus previously reported preclinical data at several scientific conferences in 2009 demonstrating that the addition of a pharmacological chaperone to ERT has the potential to address key limitations of ERT. The addition of a pharmacological chaperone has been shown to prevent the loss of activity of ERT in the circulation, increase tissue uptake and substrate reduction, and reduce antibody response. Preclinical proof-of-concept has been established for Fabry disease and Pompe disease and initial proof-of-concept work is currently being conducted for Gaucher disease.

The Company has selected Amigal as its first clinical candidate and plans to initiate a Phase 2 study with Amigal in combination with ERT before the end of 2010. Additionally, the Company is evaluating options to advance Chaperone-ERT combination therapy programs for Pompe disease and Gaucher disease.

The Company expects to report additional proof-of-concept data in Fabry, Pompe and Gaucher at various scientific conferences throughout 2010.

**Diseases of Neurodegeneration**

Amicus is committed to advancing its pharmacological chaperone technology for the treatment of diseases of neurodegeneration. The Company has advanced its preclinical program in Parkinson's disease and established initial proof-of-concept in animal models of the disease. The Company previously reported data demonstrating the prevention of synuclein accumulation in the brain after treatment with the chaperone. Today the Company announced that in recent preclinical studies treatment with a chaperone resulted in encouraging improvements in behavioral characteristics and motor function in Parkinson's animal models.

The Company expects to complete advanced preclinical proof-of-concept studies in Parkinson's disease during the course of the year and plans to report additional data at a scientific conference in the second half of 2010.

Additionally, Amicus announced today that its second lead preclinical program using the pharmacological chaperone approach is for the treatment of Alzheimer's disease. The Company expects to complete initial proof-of-concept studies during 2010 and report data in the second half of 2010.

**2010 Financial Guidance**

Amicus expects to begin 2010 with a cash balance of approximately $78 million. The Company expects to spend a total of $40 to $50 million on 2010 operating expenses. The current cash position is expected to be sufficient to fund operations and capital expenditure requirements into the second half of 2011. In 2010, the Company plans to evaluate all opportunities to continue to build on its financial strength including a range of potential global partnerships.

**About Amicus Therapeutics**

Amicus Therapeutics is developing orally-administered, small molecule drugs called pharmacological chaperones, a novel, first-in-class approach to treating a broad range of diseases including lysosomal storage disorders and diseases of neurodegeneration. Amicus' lead program is in Phase 3 for the treatment of Fabry disease.

**Forward-Looking Statements**

This press release contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995 relating to preclinical and clinical development of Amicus’ candidate drug products, the timing and reporting of results from preclinical studies and clinical trial evaluating Amicus’ candidate drug products, and the projected cash position for the Company. Words such as, but not limited to, “look forward to,” “believe,” “expect,” “anticipate,” “estimate,” “intend,” “plan,” “targets,” “likely,” “will,” “would,” “should” and “could,” and similar expressions or words identify forward-looking statements. Such forward-looking statements are based upon current expectations that involve risks, changes in circumstances, assumptions and uncertainties. The inclusion of forward-looking statements should not be regarded as a representation by Amicus that any of its plans will be achieved. Any or all of the forward-looking statements in this press release may turn out to be wrong. They can be affected by inaccurate assumptions Amicus might make or by known or unknown risks and uncertainties. For example, with respect to statements regarding the goals, progress, timing and outcomes of ongoing discussions with regulatory authorities and the potential goals, progress, timing and results of preclinical studies and clinical trials, actual results may differ materially from those set forth in this release due to the risks and uncertainties inherent in the business of Amicus, including, without limitation: the potential that results of clinical or pre-clinical studies indicate that the product candidates are unsafe or ineffective; the potential that it may be difficult to enroll patients in our clinical trials; the potential that preclinical and clinical studies could be delayed because we identify serious side effects or other safety issues; and, our dependence on third parties in the conduct of our clinical studies. Further, the results of earlier preclinical studies and/or clinical trials may not be predictive of future results. Additionally, with respect to statements regarding projections of the Company’s cash position, actual results may differ based on market factors and the Company’s ability to execute its operational and budget plans. Additionally, all forward looking statements are subject to other risks detailed in our Annual Report on Form 10-K for the year ended December 31, 2008, and our other public filings with the Securities and Exchange Commission. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. All forward-looking statements are qualified in their entirety by this cautionary statement, and Amicus undertakes no obligation to revise or update this news release to reflect events or circumstances after the date hereof. This caution is made under the safe harbor provisions of Section 21E of the Private Securities Litigation Reform Act of 1995.

CONTACTS:

Investors/Media:
Jenene Thomas
Director, Investor Relations
(609) 662-5084

FOLD –G