AVI BioPharma

Business Strategy and Corporate Priorities

March 12, 2008

Safe Harbor Statement

Comments made by management during this presentation will include forward-looking statements within the meaning of Federal securities laws. These forward-looking statements involve material risks and uncertainties and include statements which may be preceded by the words “potential,” “believe,” “expect,” “predict,” “continue,” “likely,” “unlikely,” “anticipate,” “estimate,” “optimistic,” “sustainable,” “intend,” “plan,” “project,” “target,” “aim,” “will,” “may,” “unlikely to be,” and similar words. For such statements, we claim the protection of the Private Securities Litigation Reform Act of 1995. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the time they were made.

Actual results could differ materially from our forward-looking statements due to, among other reasons, preclinical and clinical development is highly uncertain, the success and cost of our research, clinical studies and partnering endeavors, our ability to obtain additional financing, our clinical trials may not proceed at the time we expect or at all, the timing of payments and fees, if any, from our collaborators, and our ability to obtain and defend patents. Additional factors that could cause actual results to differ materially from those stated or implied by our forward-looking statements are disclosed in our SEC filings. For a discussion of these risk factors, you are encouraged to review our annual report on Form 10-K for the year ended December 31, 2006 and subsequent reports as filed with the SEC. We disclaim any intent or obligation to update these forward-looking statements, other than as may be required under applicable law.

The Opportunity

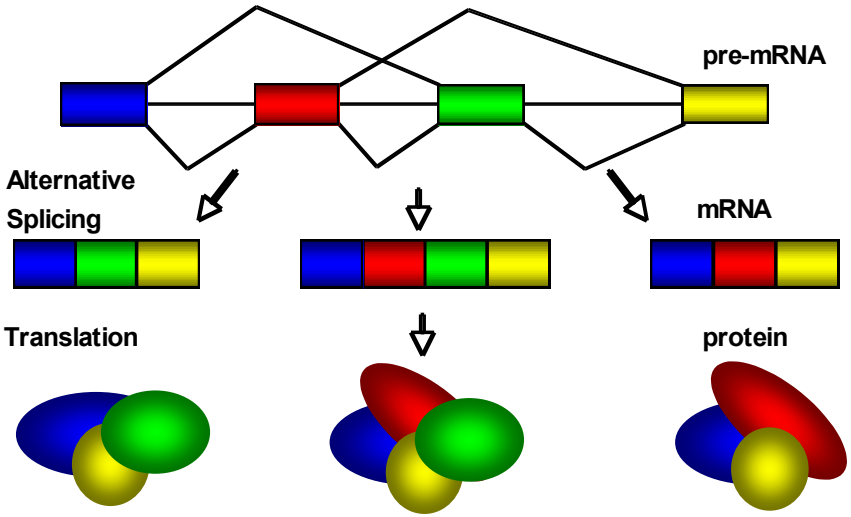
- Compelling parallels between emerging therapeutic utility of monoclonal antibodies and potential for antisense oligomers
- Insights from *beyond the genome* and RNAi highlight the central importance of alternative splicing; 26,000 genes vs. 150,000 proteins
- Indications of pending technology and corporate maturation
- Chemically-derived solutions to the challenge of bioavailability, tissue localization and uptake demonstrated *in vivo*

To capture the opportunity, AVI will focus R&D, develop a product flow process and commit to success in the clinic

Company Goals

- Advance AVI's clinical development programs
  - Evidenced by successful program partnering and commercialization
- Adapt infrastructure to support flow of product candidates
  - Augment Biological Research capability
  - Strengthen Exploratory Development in Product Development flow
- Review research portfolio
  - Select priority projects for exploratory development
  - Support partnering efforts
- Give greater emphasis to chemical control of alternative gene splicing to increase number of clinical candidates

Key for Control of Gene Expression



- 70% genes alternatively spliced
- 26,000 genes; 150,000 proteins
- Several proteins from a single gene
- Related, frequently opposing, functions
  - Promote ↔ inhibit cell death
  - Promote ↔ inhibit signal transduction

Cook Partnership

- Cook continues to pursue applications with AVI-5126 (anti-*c-myc* PPMO product) for restenosis, including catheter delivery kit and coated stent
- AVI is supporting Cook with product and analytics
- Cook is performing required studies to support its regulatory applications
- Cook may pursue both catheters and coated stents to facilitate physicians' treatment options

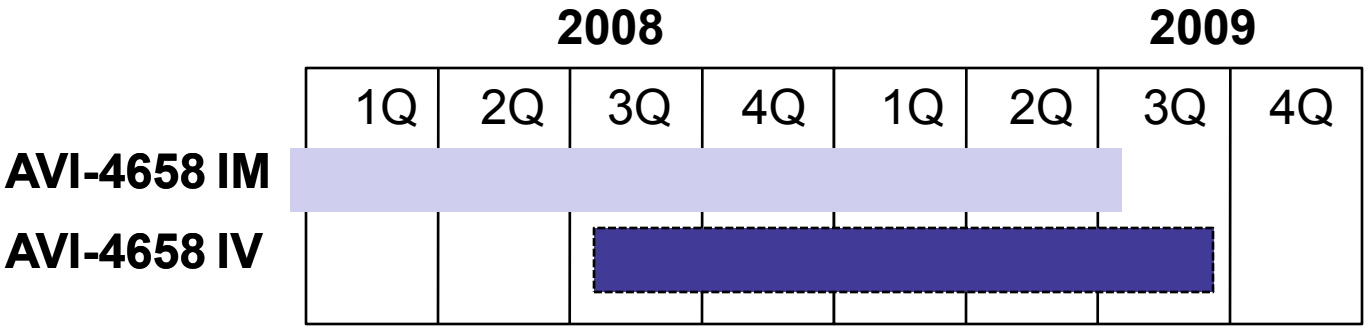
Business Development

- Advance AVI's programs to Phase II for partnering and commercialization
- Increase access to external funding for DMD program
- R&D partnership with pharma or large biotech
- Consider additional government funding opportunities

AVI-5126 CABG Program Status

- Efficacy measure is to demonstrate that AVI-5126 exposure of saphenous vein donor graft prior to CABG will reduce subsequent graft failure by 50% compared to placebo in a double-blinded, randomized, 600-subject clinical study
- Per protocol, review of clinical data required at 10, 30 and 110 subjects
  - Concurrent with the 30-subject review, an additional 17 subjects were enrolled and evaluated
  - DSMB outcome
    - Expand to more sites
    - Review after next 30 subjects enrolled (total of 77) at additional sites
- Presently, overall higher-than-expected graft failure among the 47 subjects
  - Unclear if observation is related to patient characteristics, drug, bias from a small early single-site dataset or other factors

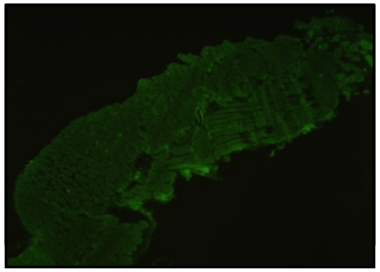
AVI-4658 DMD Program Status



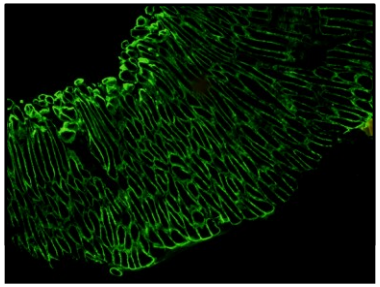
- UK
  - 4Q07 MHRA indicated that existing data package should support proposed IV study
  - 1Q08 CTA submitted for a systemic (IV) dose-ranging safety and *de novo* dystrophin production assessment study in ambulatory DMD boys
  - Expand to other exons

Mouse Muscle Biopsy*

Pre-Rx



Post-Rx



*Courtesy Steve Wilton

AVI BioPharma

Government Programs

- AVI programs are funded by the DoD, as well as the Defense Threat Reduction Agency's Transformational Medical Technologies Initiative
- Initial efforts are targeting Category A and B Bioterror Threats, with work in hemorrhagic fever viruses, pathogens and alternative approaches to viral treatments
- Specific research funded to date in Ebola, Marburg, Junin and Dengue viruses, as well as Ricin and Anthrax toxins.
- Scientific efforts result in advancements that may apply to other therapeutic research areas, e.g., drug modalities, delivery, etc.
- AVI receives reimbursement of costs incurred, overhead and, in some cases, a fixed fee

2008 Clinical/Regulatory Milestones

- 1Q
  - ✓ AVI-6003 (Marburg Musoke) – pre-IND filed
  - AVI-4658 IV(DMD) – CTA to be filed for a systemic study
  - AVI-6002 (Ebola Zaire) – pre-IND to be filed
- 2Q
  - PMO-based exon 50 product (DMD) – pre-IND to be filed
- 3Q
  - AVI-4658 IV(DMD) – anticipate dosing of first patient in a systemic study
  - AVI-5126 – next 30 patients enrolled
- 4Q
  - AVI-6002 (Ebola Zaire) – IND to be filed
  - AVI-6003 (Marburg Musoke) – IND to be filed
  - PMO-based exon 50 product (DMD) – IND to be filed