



Workshop on Second Generation Bioethanol and Biorefining 2017 João Paulo Cherubim Manufacturing and PD Director November 31, 2017

Forward-Looking Statements

This presentation and oral statements accompanying this presentation contain forward-looking statements, and any statements other than statements of historical fact could be deemed to be forward-looking statements. These forward-looking statements include, among other things, statements regarding future events, such as expected returns from funded development, anticipated revenue, including revenue from product sales, collaborations and value share payments, expected gross profit and margin, the anticipated development and commercialization of Amyris's product pipeline and revenue relating thereto, expected production costs and time to market, anticipated production capacity expansion, including the timing thereof, the anticipated growth rates of Amyris's target markets and Amyris's expected market share and revenue by target market, expected annual product sales, revenue and growth rate, anticipated corporate events, including a reverse stock split, expected financing and debt reduction in 2017 and the impact of such financing and debt reduction, expected revenue growth in 2017 and beyond, anticipated improvements of Amyris's balance sheet and product margins, and expectations regarding Amyris's financial and operational results and ability to achieve its business plan in 2017 and beyond, that involve risks and uncertainties. These statements are based on management's current expectations and actual results and future events may differ materially due to risks and uncertainties, including risks related to Amyris's liquidity and ability to fund operating and capital expenses, timing and execution risks associated with manufacturing, uncertainty regarding consummating potential transactions, including the timing thereof, and growth in sales, potential delays or failures in development, production and commercialization of products, risks related to Amyris's reliance on third parties to achieve its goals, and other risks detailed in the "Risk Factors" section of Amyris's quarterly report on Form 10-Q filed on November 9, 2016. Amyris disclaims any obligation to update information contained in these forward-looking statements whether as result of new information, future events, or otherwise.



A decade of progress

- Amyris was founded in 2003 by scientists from the University of California, Berkeley.
- In 2005, with a grant from the Bill & Melinda Gates Foundation, developed technology for the production of effective anti-malarial drug precursor, artemisinin, now in market.
- Following various rounds of venture funding and strategic investments by TOTAL and Temasek, Amyris listed shares on NASDAQ in September 2010.
- In 2011, first production and sales of products from Biofene[®], Amyris's renewable farnesene.
- In 2013, completed first year of production at our purpose-built biorefinery in Brotas, Brazil.
- This year we are executing on business plan including scale up of technology to produce a high-value fragrance oils, vitamins, sweeteners in addition to farnesene for multiple applications.



Our innovative science, world class robotics, and deep data analytics drive rapid product development



Amyris scientists build and test 100,000 strains per month

Amyris pioneered integrated robotic work cells









Industry-Leading Proprietary Tools Make Amyris the Leading Industrial Bio-Engineering & Production Company

Capacity:

- 18,000 low-cost DNA assemblies/year at 95% accuracy
- Targeted DNA integration at up to 6 loci per transformation
- Fastest, most efficient software allows scientists to "code" DNA directly into cells
- Integrated data management enables machine learning
- Ability to test over 1M unique strains per year

Average time from concept to target production cost is now less than 12 months



We are winning today in high-growth markets





Leading partners remove product & market risk



Our distinctive and advantaged business model removes product and market risk while funding development

Benefits of model

- Covers direct R&D costs
- High investment returns from funded development
- Long-term annuity from product profit share







Upfront funding

2 Develop



Milestone payments from partner

3 Supply



Sale and profit on shipment to partner

4 Profit split



Split profit on partners downstream sale



Our Current Collaboration Portfolio



- **1**. Flavor and fragrance
- 2. Flavor and fragrance
- 3. Farnesene
- 4. Food ingredient
- 5. Multiple molecules (DARPA, 400+ for development)
- 6. Isoprene
- 7. Ethanol
- 8. Cosmetic ingredients
- 9. Small molecule Oncology
- **10**. Antibody organism development
- Technology access partnership (40+ molecules)
- **12.** Small molecule Antibiotic
- 13. Farnesene (cellulosic)
- 14. Food ingredients/nutraceuticals*

* Only MOU signed; expect to be closed in Q4

Products commercialized, or in pipeline, drive targets





Sugar reduction market is a step-out opportunity



Amyris technology will disrupt today's stevia-based sugar replacements





We plan to launch our first products in 1st-Half 2018



Vitamins help grow healthy, heavier animals very fast – providing protein the world needs and keeping farmers happy



- Europe has led the way in regulatory reduction of antimicrobial growth promoters
- U.S. FDA has updated guidance to discourage antimicrobial overuse (2017)
- China launched a national program to reduce overuse by 2020 (2016)
- A WHO study of Danish industry concluded no serious economic consequence of the phase-out (2002)

Competitive advantage		
Lowest cost	Highest purity	Protected technology
Vitamin E 40% lower than legacy technology	Directly produces Vitamin E oil (95% purity)	Farnesene-based chemistry
Antibiotics: Ell data (bi ama auropa au) 2016. 8 countries with data for this range		

Antibiotics: EU data (bi.ema.europa.eu), 2016, 8 countries with data for this range Vitamin E: Transparency Market Research& Global Market Insights Inc., 2016



We have proven commercial production capability



- Brotas 1 with up to 24,000 mt of Farnesene capacity
- We've produced and sold >23,000,000 kg of products from our plant
- Four different molecules, both liquids and solids



Brotas II plant





Leading Shareholders and Board of Directors



One day soon all products will be made our way



Thanks!!