


Evolve (SIX: EVE)





Improving Lives
with Biosynthesis

San Francisco
January 2012




Evolve Snapshot

- **Unique, proven, widely applicable, biosynthesis technology**
 - Creates novel products and production methods in yeast
 - More than 50 patent families filed to date
- **Product focus in 3 "health & wellness" areas**
 - Natural flavorants and sweeteners: Vanilla, Stevia
 - Protection against microbial pathogens: Pomecins
 - Diabetes & obesity: EV-077, Stevia
- **B2B model focused on core competencies**
 - Provide innovative ingredients to other companies
 - Partnerships with Roche, IFF, BASF, Roquette, US DoD
 - 2010 revenues CHF 18.6 mn (1H 2011 CHF 6.9mn)
- **Many pharma & food majors want to grow in space**
 - But have limited partnering or acquisition options
 - Evolve is well positioned with differentiated assets and a highly experienced team

	Product Family	On Market	Addressable Market
	Vanilla	2014	\$ 0.4 bn
	Pomecin	2015	\$ 2 bn
	Stevia	2015	\$ 4 bn
	EV-077	2017	\$ 10 bn

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Will Transform Our Ability to Exploit the Chemistry of Food

- **Food is very diverse - c. 11,000 basic foods in the world**
 - Oysters, ginger, chickens, soy, honey, seaweed, herrings, beer etc.


- **Food contains many, many valuable compounds**
 - Many known, but many that never been described
 - Many compounds with “pharmaceutical” functionality

- **But most of these compounds unreachable in practice**
 - Hard (“impossible”) to economically extract, complex supply chains

- **Biosynthetic technologies can unlock these molecules**
 - Allowing production by fermentation




Reb E < 0.1% of Stevia
Very hard to purify



1 kg of saffron requires
250,000 crocus flowers
>90% from Iran

.....and many more

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Evolve - Combinatorial Biosynthesis in Baker's Yeast

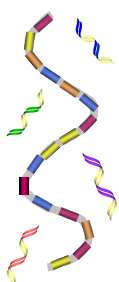
**Create functional
chromosomes from
gene libraries**

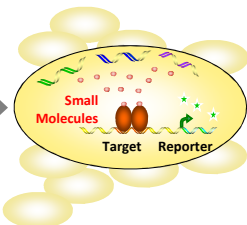
**Create billions of
new cells & select
“Best for Purpose”**

**Identify compounds
and the genes that
make them**

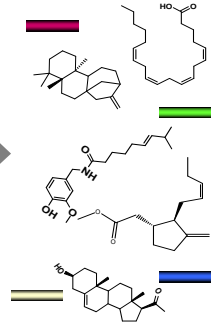
**Optimise
production
& scale-up**

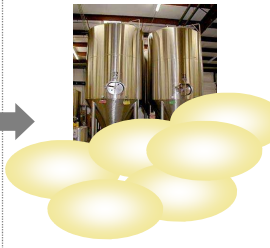






Small Molecules
Target Reporter





More than 50 patent families filed to date

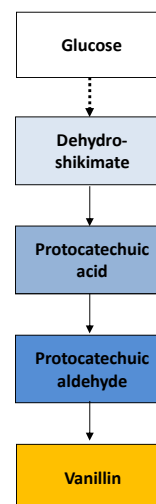
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Key Benefit (1) – Make Existing Compounds in New Ways

- **Can find new biosynthetic production routes**
 - Combinatorial approach - do not need to know route to create it
 - Provides protective intellectual property
- **Can find optimal gene combinations for high yield**
 - Parallel optimisation across whole pathway
- **Natural production process with simple supply chain**
 - Baker's yeast widely used in large scale production
 - Reproducible, traceable fermentation in controlled locations

Vanillin Production in Yeast



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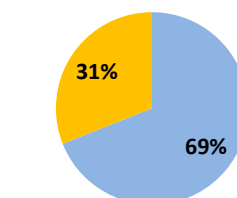
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Key Benefit (2) – Make Novel, Functional Compounds

- **Can combine biosynthetic capabilities of many species**
 - Plants, fungi, jellyfish, insects, humans etc
- **Can use “biologically rich” functional assays**
 - Pathway read outs, Phenotypic responses; Protein:Protein interactions etc. – relevant for pharma but also other sectors
- **Creates a unique, functional, chemistry space**
 - Most compounds novel, often very novel
 - But compounds still “drug like” – average molecular weight 295, rotatable bonds 5.4, TPSA 74, LogP 2.6

c.70% of Active Molecules are Novel




■ Novel Structure
■ Previously Described

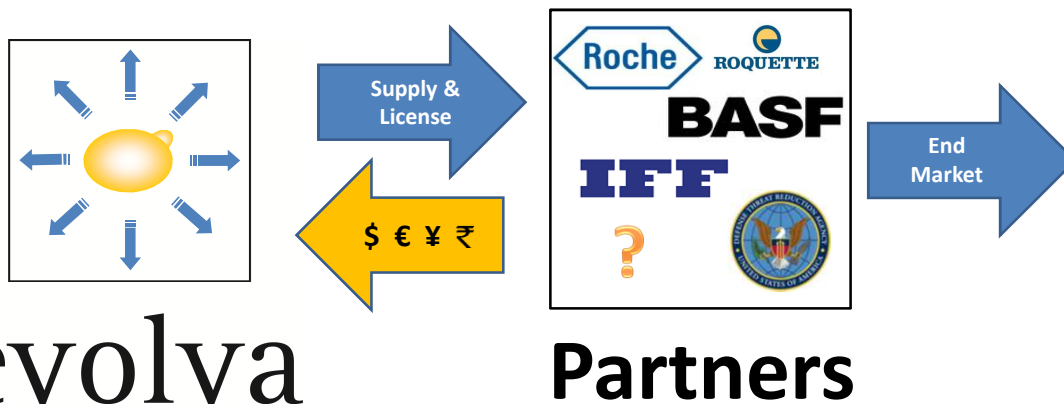


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 **Evolve Will Focus on This Unique Capability**


- Discover and provide innovative, sustainable ingredients for health, nutrition & wellness
 - Supply ingredients deriving from our platform to other companies



The diagram illustrates the flow from Evolva to Partners and then to the End Market. On the left, a central yellow sun-like icon is surrounded by eight blue arrows pointing outwards. A blue arrow labeled 'Supply & License' points from this icon to a box containing logos for Roche, ROQUETTE, BASF, IFF, a question mark, and the FDA seal. A yellow arrow labeled with currency symbols '\$ € ¥ ₹' points from the Partners box back to the Evolva icon. A final blue arrow labeled 'End Market' points from the Partners box to the right.

evolva **Partners**

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 **Many Large Companies Will Need Such Products**

Consumerisation of Health

- Increasingly health-aware individuals
- Western government budget pressures
- Growing health needs in emerging markets
- Creates demand for health & wellness products – that appealing, convenient, natural & affordable

Economics, demographics, health science, regulatory frameworks [..] all leading to a significant opportunity for a new industry located between food and pharma

BASF's new Nutrition & Health division established with effect from Aug 1, 2010

We [will] move away from a reliance on traditional 'white pill, western markets.'

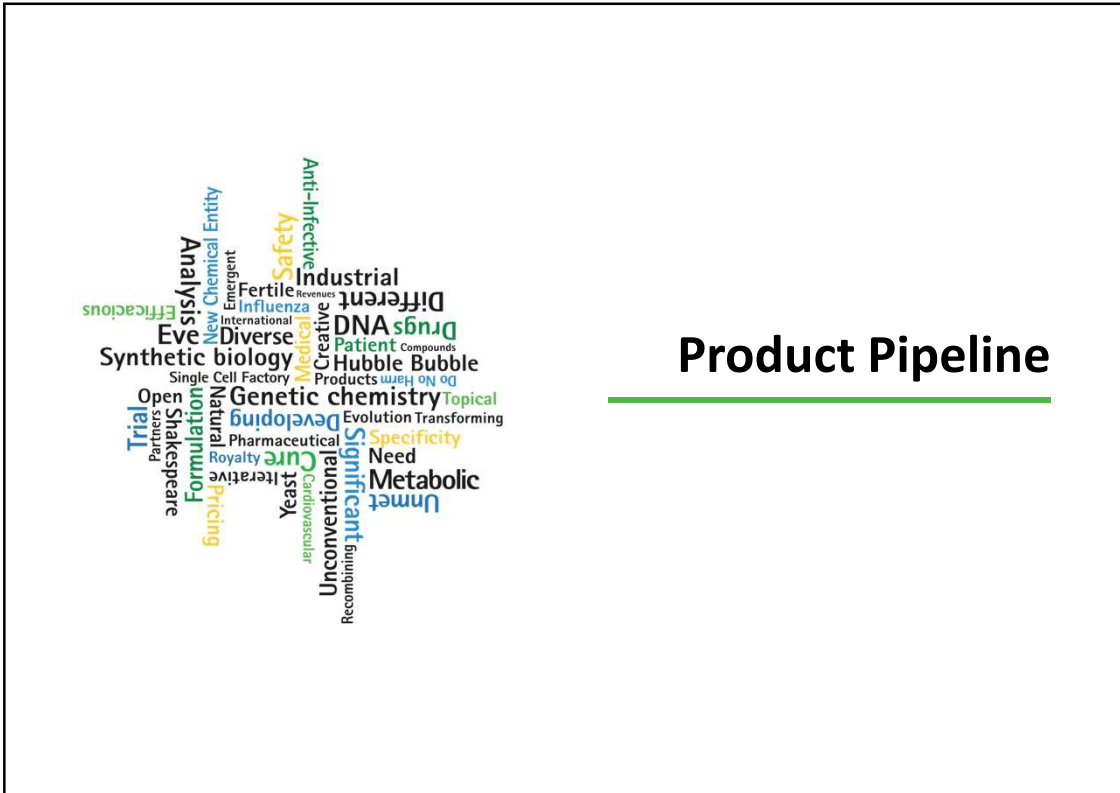
Peter Brabeck-Letmathe
Chair, Nestle, Sept 2010

BASF, 2010

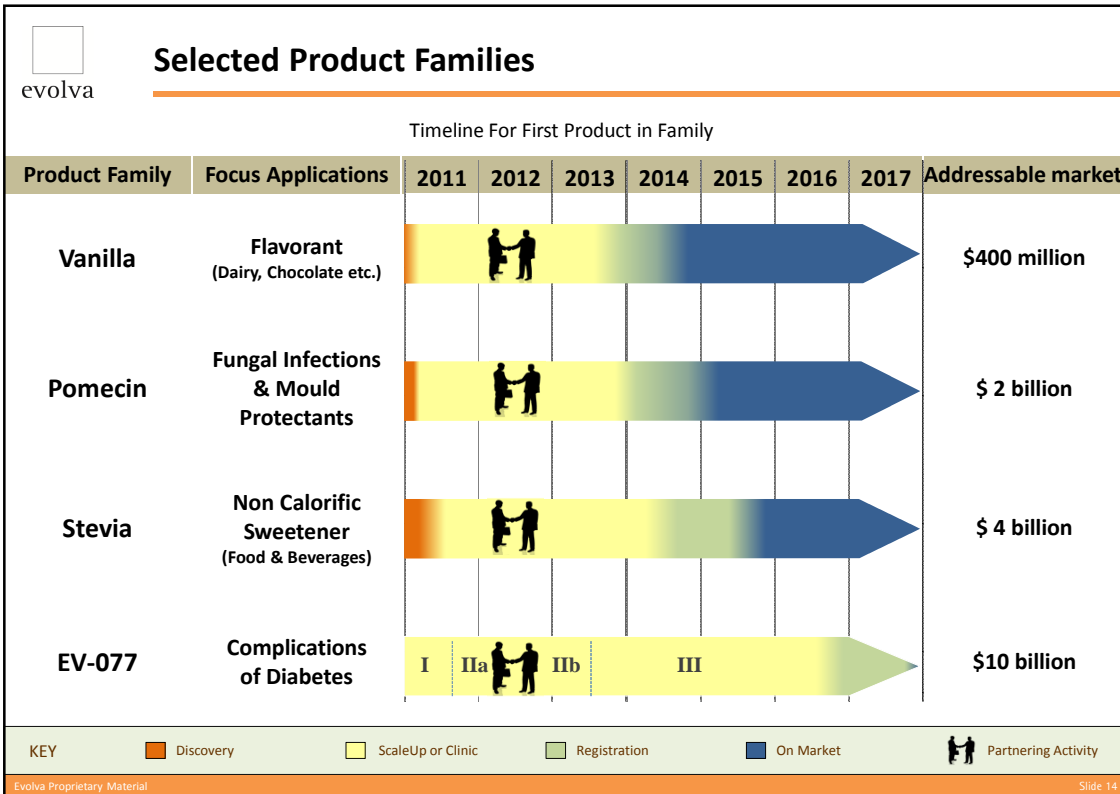
Andrew Witt, CEO, GlaxoSmithKline, 2011

.....and many more

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Product Pipeline



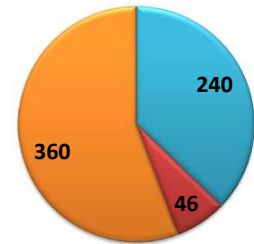


Vanilla – Natural, Good Tasting Flavours



- **Vanilla market c. \$650mn p.a., growing at 4% p.a.**
 - Used in many products (chocolate, dairy in particular)
- **Current disconnect between supply and demand**
 - Natural “vanilla” – complex taste blend, but expensive
 - Synthetic “vanillin” – cheap, but artificial single molecule
- **Evolve has a fermentation alternative**
 - A natural product with several taste variants
 - At a price competitive to the synthetic
- **Market launch expected 2014**
 - Commercially viable yields already reached
 - Pilot scale starts 2012

c. \$ 650 million
Vanilla market
(2009)



■ Vanilla Essence (from orchid)
■ Semi Synthetic Vanillin
■ Synthetic Vanillin

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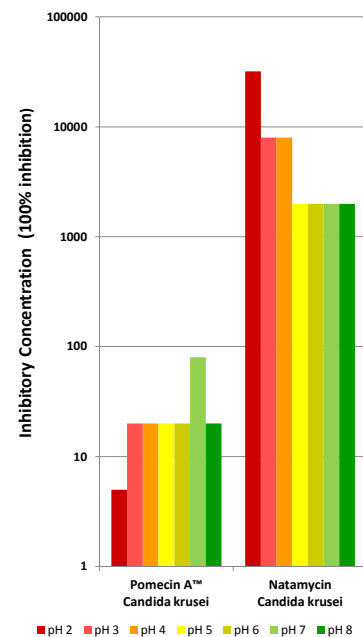
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Pomecins – Natural Antifungals & Mould Inhibitors



- **Fungal pathogens cause major problems, f.x.**
 - Skincare – nail fungus, dandruff, candidiasis etc.
 - Food chain – crop losses, food spoilage in storage etc.
- **Existing antifungals sell \$20 billion p.a but limitations (efficacy, toxicity, resistance)**
- **Pomecins a new family of natural antifungals**
 - Very potent, new mechanism
 - Broad spectrum - including resistant strains
 - Good toxicity profile
- **Market launch expected 2015**
 - Partner enabling packages during 2012
 - Pomecin A - skin care and topical infections
 - Pomecin B - food chain applications



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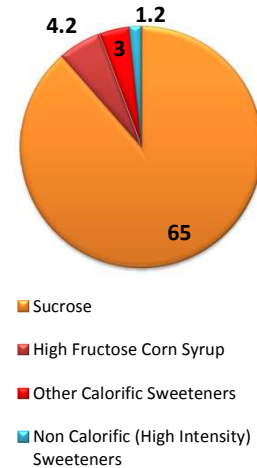


Stevia – Natural, Non-Calorific Sweeteners



- **Major need for alternatives to sugar**
 - But current alternatives are sub-optimal - artificial sweeteners lack ideal taste, convenience & naturalness
- **Stevia extracts natural & convenient, but key drawbacks**
 - Complex supply chain with challenging logistics and price
 - Hard to optimise taste as leaf contains multiple similar compounds
- **Evolve makes individual Stevia compounds**
 - Hugely simplifies the supply chain, reduces capex, liberates the price
 - Allows taste customisation for different markets & products
- **Market launch expected 2015**
 - Pilot scale commences 2013
 - Major benefits mean could take significant share of the market

c. \$ 70 billion Sweetener market



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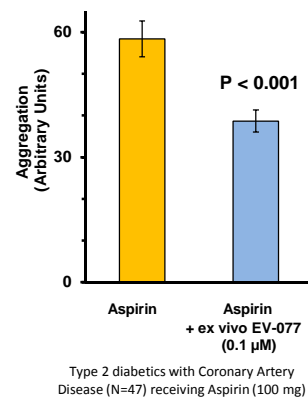


EV-077 – Natural Mimetics for Diabetic Complications



- **Oxidative stress in diabetes produces prostanoids –** which activate thromboxane receptor & cause *inter alia*
 - **Progressive kidney damage** - c. 10 million sufferers in developed world. No current treatment stabilises disease
 - **Increased risk of thrombosis.** Many diabetics inadequately treated by existing anti-platelet drugs
- **EV-077**
 - Oral small molecule that inhibits the activity of prostanoids
 - Ex-vivo studies show significant benefit on top of aspirin
 - Completed Phase I - 77 healthy volunteers received EV-077
 - Well tolerated, reversible and fast acting
- **Phase IIa study commenced Q4 2011**
 - Up to 64 diabetic patients in Germany. Will measure EV-077 impact on kidney damage, inflammation, thrombosis, blood flow
 - Trial results expected towards end of Q2 2012

EV-077 works on top of aspirin in high risk diabetics



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 **Board & Management**

Board

Erich Schlick (chair)
Wellington. Ex 3i,
Head of R&D, BASF Pharma

Michel Pettigrew
President, Ferring
Ex BMS, P&G

Jean-Philippe Tripet
Aravis, Ex Lombard Odier

Nicole Dubois
The Monitor Group
Ex BCG, McKinsey

Sir Tom McKillop
Ex CEO, AstraZeneca

Claus Braestrup
Ex CEO, Lundbeck
Ex Schering, Novo

Ganesh Kishore
Ex Chief Biotech Officer, DuPont
Ex Chief Biotech Officer Monsanto

Stuart Strathdee
Ex Corporate Dev Director, Tate & Lyle

Neil Goldsmith
CEO

Management

Neil Goldsmith
Chief Executive Officer
Topotarget, Personal Chemistry,
PNAD, BIAcore, Quadrant

Alexandra Sorensen
President
Auda, Phytara

PM Murali
CEO, Evolva India
Dalmia, Unilever, Battelle

Simon Waddington
CEO, Evolva Nutrition Inc
ICI, Monsanto, Polytechnos


Jakob Hansen
Chief Financial Officer
Nuevolution, Zealand,
Nordea, Novo

Jutta Heim
Chief Scientific Officer
Basilea, Novartis
Ciba-Geigy


Pascal Longchamp
Chief Business Officer
Phylom, Maxygen

Norbert Bender
Chief Medical Officer
Hoechst, Knoll, Trigen, Virologik

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 **Selected Recent News Flow**

- **Jan 13** **Partnership with IFF**
- **Mar 1** **Partnership with BASF**
- **Apr 5** **Proposed Acquisition of Abunda (completed July)**
- **Jun 14** **Milestone Payment from Roche**
- **Jul 15** **EV-077 Completes Phase I Trials**
- **Jul 25** **Positive EV-077 Data in Diabetics (ex-vivo study)**
- **Aug 3** **Jay Keasling & Doug Cameron join as Scientific Advisors**
- **Aug 15** **CHF 30mn Stand-by Equity Distribution Agreement (SEDA)**
- **Nov 7** **Regulatory clearance to commence Phase IIa studies on EV-077**
- **Dec 8** **Second Roche milestone**
- **Jan 2, 2012** **Partnership with Roquette**



2011

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Financials

CHF million	2008	2009	2010	1H2011
Revenues	11,9	18,9	18,6	6,9
Operating Costs				
Discovery, technology	9,9	14,7	19,8	9,0
Compound development	6,3	6,5	11,1	3,5
General and administration	3,8	6,6	10,8	5,1
Total Operating Costs	20,0	27,8	41,7	17,5
Loss bef. int. & tax	-8,1	-8,9	-23,1	-10,6
Financial items and Tax	0,5	0,7	0,2	-0,1
Net Income	-8,7	-9,6	-23,3	-10,5
Cashflow				
Operations and investment	-6,2	-8,5	-18,1	-7,3
Financing (incl. currency)	5,2	55,1	2,9	-0,5
Cash End of Period	6,2	52,9	37,7	29,9

Cash through end 2012 - full use of SEDA to add 12-18 months

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Comparators & Peer Group

- Major listed corporates operating similar models


- Croda (UK)
- DSM (Neth.)
- DuPont (USA)
- Lonza (CH)
- Novozymes (DK)

- Listed growth stocks with common elements to Evolve

- Amyris (USA)
- Codexis (USA)
- Metabolic Explorer (France)
- PureCircle (UK)
- Solazyme (USA)


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Selected Projections

- **Product Pipeline**
 - EV-077 Phase IIa results
 - Pomecins Partner enabling data in multiple applications
 - Vanilla Initiate pilot scale-up
 - Stevia Preparations for pilot-scale (initiate in 2013)
- **Partnerships**
 - Additional technology partnerships
 - First product partnerships
- **Finances**
 - 2011 revenues from current contracts c. CHF 10-11 million
 - Cash through year-end 2012 – full use of SEDA adds 12-18 months
 - 2011 results due 22 March 2012



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Evolve – A Distinctive Business In An Industry Sweet-Spot

- **A Focused, Derisked B2B Model**
 - Focus on core competencies; multiple partnerships
- **Strong Technology in a Transforming New Area**
 - Proven through successful collaborations and pipeline
 - More than 50 patent families covering approach
- **Compelling "Health, Wellness & Nutrition" Products**
 - Managing & preventing diabetes & obesity: EV-077, Stevia
 - Protection against microbial pathogens: Pomecins
 - Natural flavorants and sweeteners: Vanilla, Stevia



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