

Novartis : Experiences of Acquisition Accounting under IFRS 3

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Agenda

- Introduction to Novartis
- IFRS 3
- IFRS vs US GAAP

Novartis Group Key Figures - 2006

USD

Sales	37.0 bn
Operating income	8.2 bn
Net income	7.2 bn
Headcount	100,735

- Quoted on the Swiss Exchange and NYSE (2000)
- Utilized IAS (now IFRS) as its primary reporting framework since 1993

Our key divisions



Pharmaceuticals

- Cardiovascular & Metabolism
- Oncology & Hematology
- Neuroscience
- Respiratory & Dermatology
- Arthritis/Bone/Gastrointestinal/Urology (ABGU)
- Infectious Diseases, Transplantation & Immunology (IDTI)
- Ophthalmics

¹ Sale to Nestlé due to be finalized in 2007

Vaccines & Diagnostics

- Novel vaccines
- Diagnostics

Sandoz

- Generics

Consumer Health

- OTC (Over The Counter)
- Medical Nutrition¹
- Animal Health
- Gerber
- CIBA Vision

IFRS 3 – Business Combinations

- Replaces the old *IAS 22 – Business Combinations*
- Significant changes
 - *Method of accounting* – Must use purchase method. Pooling of interests prohibited
 - *Assets & liabilities acquired* – All identifiable assets, liabilities and contingent liabilities acquired are measured at 100% of fair value
 - *Goodwill* - Not amortized but tested for impairment annually
 - *Negative Goodwill* – Recognized in profit and loss immediately
 - *Restructuring costs* – Only recognized to the extent that a liability exists at the acquisition date

Key objectives of a purchase price allocation (PPA)

- The purchase method of accounting for a business combination consists of:
 - separate recognition and measurement of the acquiree's identifiable assets, liabilities and contingent liabilities at full fair value
 - identification of goodwill if the purchase price exceeds the net assets acquired. Goodwill has to be justified by buyer specific synergies, acquired growth platform or acquired intangible assets (e.g. assembled workforce) not separately recorded
- The final result of the purchase price allocation is the opening balance sheet for the acquisition
- The PPA forms the basis for future amortization charges and for asset impairment tests

Key types of identified assets

Inventory

- Revaluation is always required since book value does not include a margin on the manufacturing activity and the use of intellectual property rights
- The revalued inventory is expensed to COGS over the period in which the acquired inventory is sold

Property, Plant & Equipment

- Revaluation is only needed, if the value of an item has increased substantially since it was acquired (e.g. land)
- Except for any land, the revalued PP&E is depreciated over the life of the asset

Intangible Assets

- Normally substantial gaps between book and fair values since internally generated intangible assets are usually not recognized in the pharmaceutical industry
- Amortized over the useful life of the asset, but amortization does not start before asset is available for use, i.e. In-Process R&D (IPR&D) amortization does not start at day 1

Categories of identified intangible assets

Main categories considered:

- Product related assets:
 - patents
 - product and trade names
 - clinical data
 - customer relationships etc.
- Development projects (IPR&D)
- Core technology
- Manufacturing and other contracts

Novartis usually tries to take a composite “currently marketed product” asset approach where possible for the product related assets as this leads to simplified cash flow calculations for “cash generating units”

Novartis 2006 segmentation of intangible assets

	<u>Goodwill</u>	<u>Acquired research & development</u>	<u>Core development technologies</u>	<u>Trademarks, product & marketing rights</u>	<u>Other intangible assets</u>	<u>Total</u>
	(\$ millions)	(\$ millions)	(\$ millions)	(\$ millions)	(\$ millions)	(\$ millions)
Pharmaceuticals	2,349	1,404		2,194	124	6,071
Vaccines and Diagnostics . . .	1,111	465	160	1,853	43	3,632
Sandoz	6,567	336	414	2,160	65	9,542
Consumer Health— continuing operations . . .	632	161		880	298	1,971
Corporate				11	3	14
Total	<u>10,659</u>	<u>2,366</u>	<u>574</u>	<u>7,098</u>	<u>533</u>	<u>21,230</u>

*Vaccines and Diagnostics Division is newly formed following the acquisition of Chiron Corp. in 2006
Source: Novartis 2006 Annual Report

Major technical issues to address with PPA and subsequent impairment tests

- Definition of cash generating units and its impact on impairment tests
- Categorization of identified intangible assets
- Valuation approaches
- Accounting for income tax benefits in the purchase price allocation
- Justification for goodwill
- Subsequent impairment testing approach

“Cash generating units” concept

- IAS 36 requires the identification of so-called “cash generating units” whose cash flows are used for valuing:
 - Identified intangible assets
 - Additional cash flows arising from a “business” which substantiate “goodwill”

IAS 36 definitions of cash generating units

■ Identified Intangible Assets – IAS 36 para 66 to 70

- Smallest group of assets that includes the asset and generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets; and
- If an active market exists for the output produced by an asset or group of assets, that asset or group of assets shall be identified as a cash generating unit (e.g. individual product or process)

■ Goodwill – IAS 36 para 80

- Represents the lowest level within the entity at which the goodwill is monitored for internal management purposes; and
- Not be larger than a segment based on either the entity's primary or the entity's secondary reporting format determined in accordance with IAS 14 Segment Reporting

Consequences of cash generating units

- After initial allocation of the purchase price to the identified “cash generating units” has been made this is locked in for impairment testing purposes
 - Excess values in one cash generating unit cannot be used to off-set over valuations in another cash generating unit
 - In larger cash generating units some compensation within the unit is possible
- Only a subsequent reorganization/acquisition could result in a review of these cash generating units

Cash generating unit for marketed products

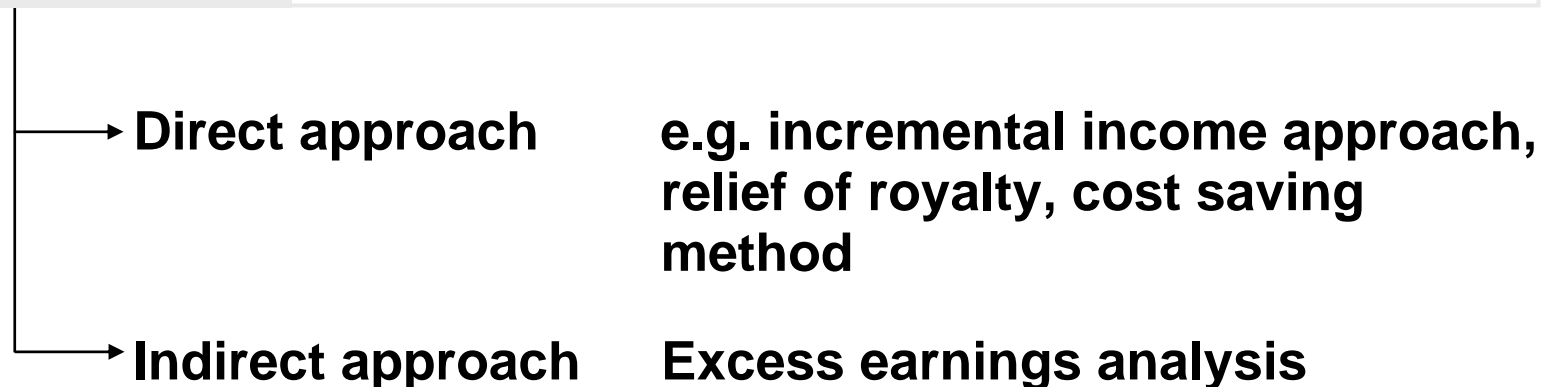
- For Sandoz generics in particular we assessed the ability to group marketed products together for the purpose of impairment testing e.g.
 - by therapeutic area
 - by geographic markets
- Unfortunately we had to conclude that as there is usually an active local market for each active ingredient being sold:
 - Lowest cash generating unit for marketed products is the individual molecule in each country
 - Results in approx. 450 molecule/country combinations

Cash generating unit for In – Process R&D

- In-Process R&D projects by their nature are uncertain and therefore there is a high risk of impairment. In order to minimize this, the following has been accepted in the Hexal and Eon acquisition:
 - Lowest cash generating unit for IP R&D can be the portfolio of acquired projects grouped by underlying enabling core technologies (i.e. patches, implants, inhalers, biopharmaceuticals...)
- However, usually, each development project is valued individually and bears therefore the risk of impairment

Valuation approaches applied in PPA

Market approach	Values based on market prices
Cost approach	Values based on replacement/-production cost
Income approach	PV of earnings of an asset or costs avoided



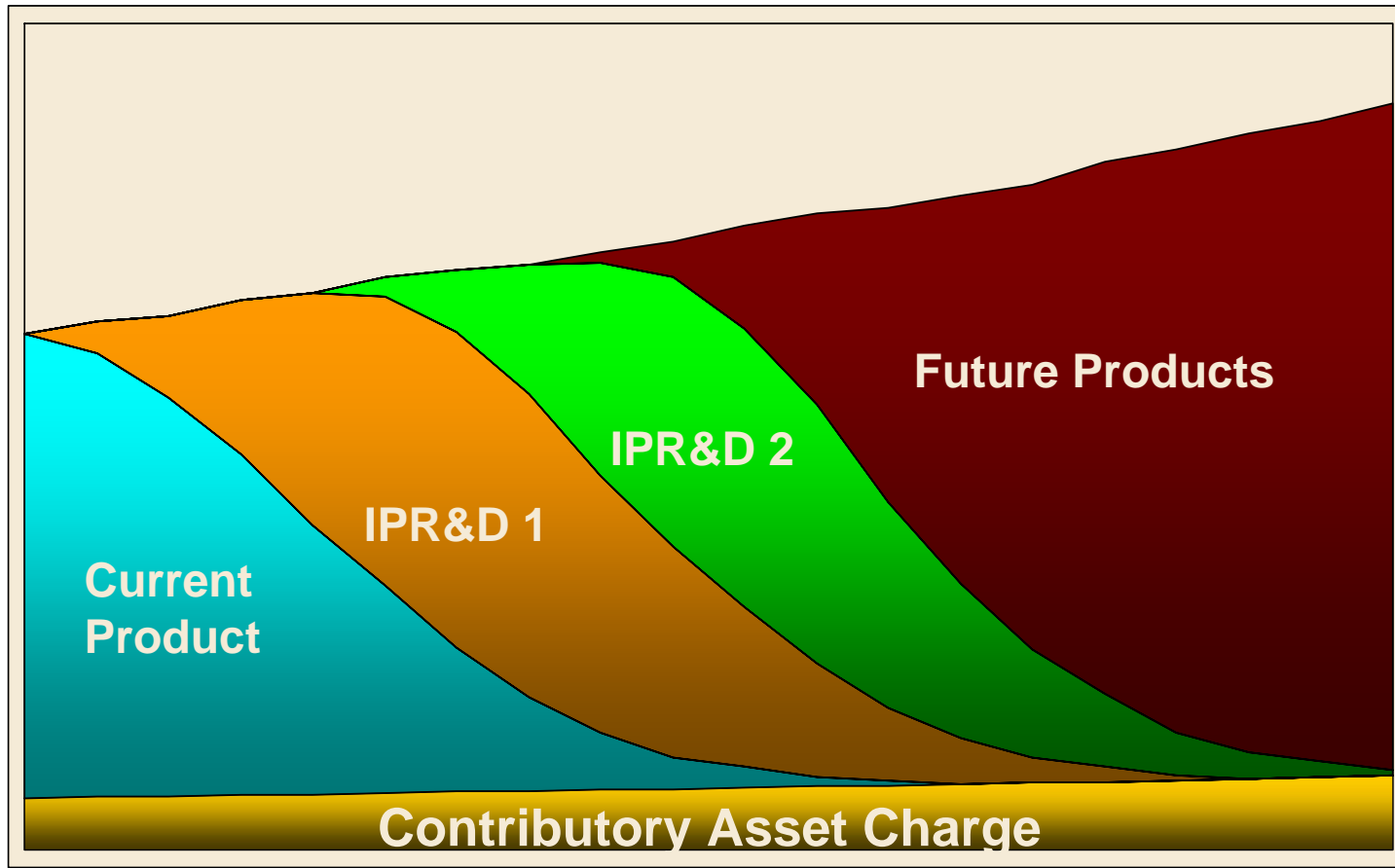
⇒ The excess earnings approach is used to value currently marketed products and IPR&D

Excess earnings vs. Discounted cash flow (DCF) methods

On the surface there are many similarities between the two approaches as they both use discounting techniques.

- The biggest difference relates to the timing of the impact of capital investments:
 - Under the excess earnings approach there is an allocation of part of the earnings stream to “contributory assets” with the earnings after this charge being discounted
 - Under the DCF method the impact on cash flows are at the point in time the investment is made

Contributory Asset Charge



For standard contributory assets the charge represents a fair return on all other assets employed in the earnings process

Contributory assets & core technology

- Standard contributory assets are:
 - working capital
 - net fixed assets
 - assembled work force

- A more innovative asset is **Core Development Technology** contributing to the development of several projects and identified separately
 - Ability to make “hard-to-make” generic compounds for
 - patches
 - inhalers
 - implants
 - biopharmaceuticals...
 - “Core development technology” represents identified and separable acquired know-how used in the development process
 - Amortize once used over estimated useful life typically between 15 and 30 years
 - Test for impairment on the basis of the Global portfolio of products and projects pertaining to each technology area after acquisition (including those developed by the acquirer and/or after the acquisition date)

In-process R&D process – Patented vs. Generic

Patented Pharmaceutical products

- Research & development (usually) of new compound
- Extensive clinical trials
- Considerable uncertainty about ability to successfully complete development and get approval
- Patented Pharmaceutical companies have a limited number of compounds being developed at any one time

Generic products

- Existing compounds are copied
- Very limited trials once bio-equivalency proved
- Limited uncertainty about ability to successfully complete development and get approval.
BUT a lot of uncertainty about competitive position and therefore commercial success
- Generic companies have many products in development at any one time
- Resources get quickly re-allocated as competition beats you to the market

In-process R&D valuation for generics

- It was necessary to assess appropriate basis for valuing IPR&D
 - Value on a sunk historic cost basis?
 - Value on a comparable market basis (e.g. value of a licensed in generics dossier)?
 - Value with DCF-method on a portfolio basis?
- Decision to value on a portfolio basis with the DCF-method together with separately identified “Core development technology” is suitably addressing the high commercial risks
- Best estimate of the market value of comparable licensed-in dossiers used to “cross-check” such DCF value

Taxation consequences

- Identified assets (tangible or intangible) should be valued in a neutral way irrespective of the structure of the transaction (e.g. asset or share transaction)
 - Fair value of intangible asset determined using an income approach is increased by the theoretical value of the tax amortization benefit in the jurisdiction where the intangible asset is based (i.e. tax benefit for an individual asset)
 - Establish deferred tax liability on stepped-up financial reporting asset base compared to tax base:
 - Tax benefit included in the asset value is discounted
 - Deferred tax liability on the difference between the accounting and tax value is undiscounted
 - Higher goodwill as a result of the difference

Tax Amortization Benefit

- Tax Amortization Benefit applicable with the Income Approach
 - As the Fair Value of an asset is established on the theoretical basis that such asset is acquired and/ or transferred in an individual asset transaction, the acquirer is entitled to an allowable tax deduction benefit resulting from the amortization of the acquired asset over its tax allowable useful life. Hence, the acquirer is willing to pay such additional amount to the seller to gain control of such asset
 - The tax amortization benefit is calculated by discounting the tax amortization amount of the indicated value of the asset based on the expected future cash flows over the tax allowable useful life of the asset. This is a circular calculation as the value of the asset increases with the added tax amortization benefit. Resolving the circularity of such estimate to the nth degree allows the calculation of such benefit

Tax Amortization Benefit (example)

	USD
Book Value of asset	-
Fair Value of the asset (excluding TAB)	100

Assume it amortizes over 5 years and the tax rate is 40%

	Amortization	Tax Benefit	Discount rate 6%
Year 1	20.0	8.0	7.5
Year 2	20.0	8.0	7.1
Year 3	20.0	8.0	6.7
Year 4	20.0	8.0	6.3
Year 5	20.0	8.0	6.0
		TAB	33.7
Fair Value of the asset (including TAB)		133.7	

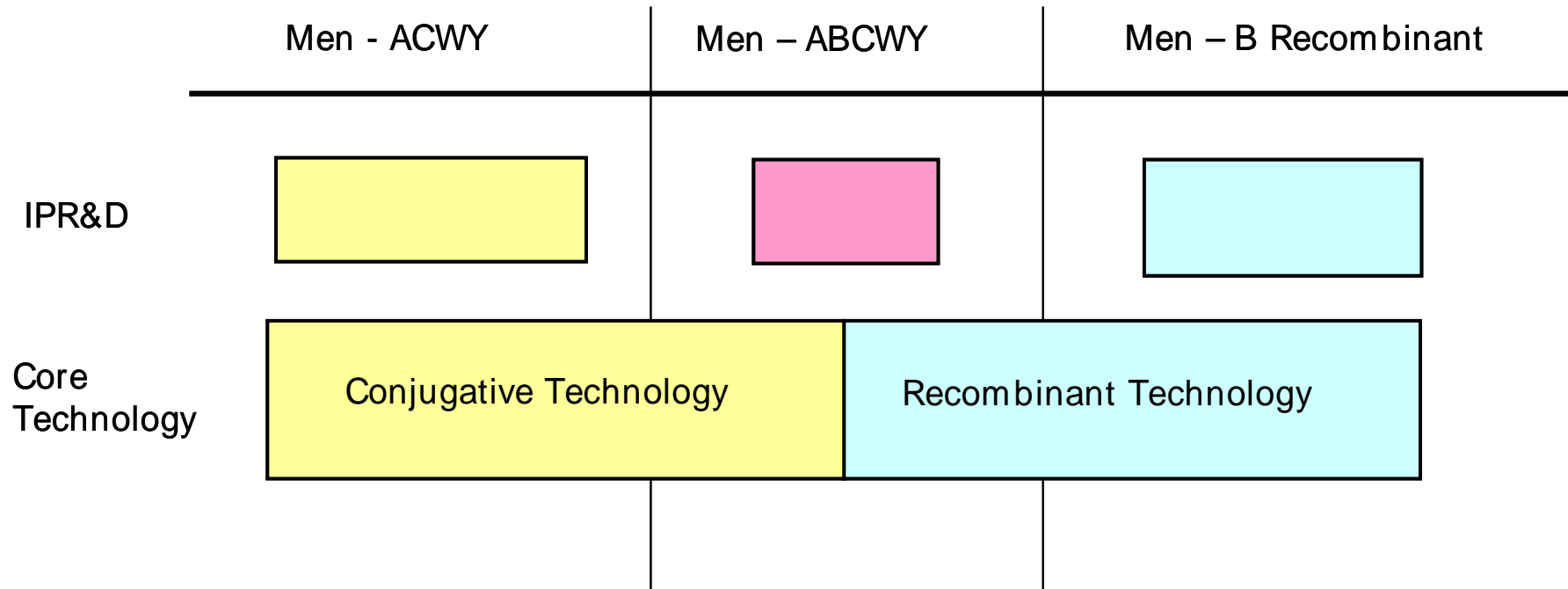
Goodwill

- Goodwill is no longer just a balancing figure not requiring justification
- Goodwill needs to be justified by:
 - Quantified synergies (buyer specific)
 - Growth platform (future new products not yet identified)
 - Assets not allowed to be separately identified under the accounting rules (e.g. value of the assembled workforce)

Synergies: Market Participant vs. Buyer Specific

- Synergies are usually related to cost savings, split between operating expense savings and savings on the technical operations (i.e. facilities that might get closed down)
- If any or all of these synergies are synergies that could be achieved by any other potential buyer then they qualify as Market Participant Synergies and thus should increase the value of identified assets (mainly intangibles). If not, then they are Buyer Specific Synergies and thus are used to justify part of the residual goodwill

Chiron Meningitis Business



Columns represent Revenue Streams, Boxes represent Intangible Assets

Acquired R&D Intangibles (in a business combination)

	IFRS	US GAAP
All business combinations post March 31, 2004	Identified and Capitalized separately <i>(Tested for impairment)</i>	Currently Identified and Expensed <i>(proposed to align with IFRS in the revision)</i>

Goodwill

	IFRS	US GAAP
Step – acquisition	Fair value 100% of acquired assets and liabilities	Currently, Fair value newly acquired portion of assets and liabilities <i>(proposed to align with IFRS in the revision)</i>

“Cash generating units” concept

- IAS 36 requires the identification of so-called “cash generating units” whose cash flows are used for valuing:
 - Identified intangible assets
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- US GAAP uses the concept of reporting unit whereas the IFRS cash-generating unit level is usually lower than a reporting unit

Thank you !!

Q & A?

