



Pharma trifft Medizintechnik – Neue Wege der Kooperation mit Zukunftspotenzial

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Tempora mutantur....et nos in illis



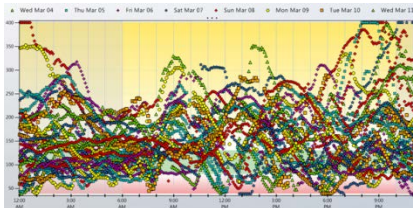
Arzneimittel



Medizinprodukte



Diagnostika



Big Data



Definitionen

Drug

A product ...

.... intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease

Device

An instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or similar article

.... intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease

.... which does not achieve its intended purposes through chemical action in man and which is not dependent upon being metabolized to achieve its primary purposes



Klasse I



Klasse IIa



Klasse IIb

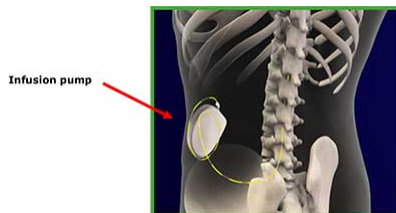
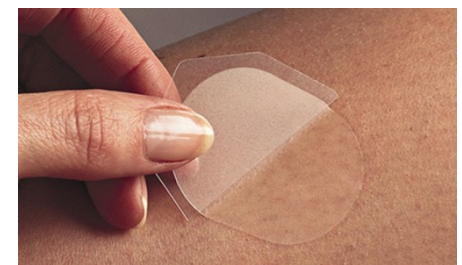
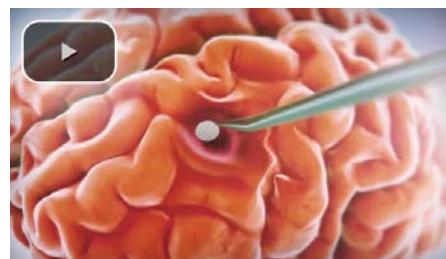
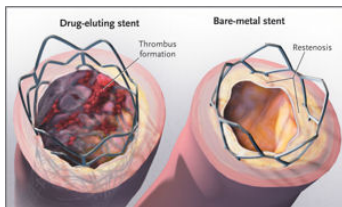


Klasse III

Konvergenzbeispiele (1)

Drug / Device

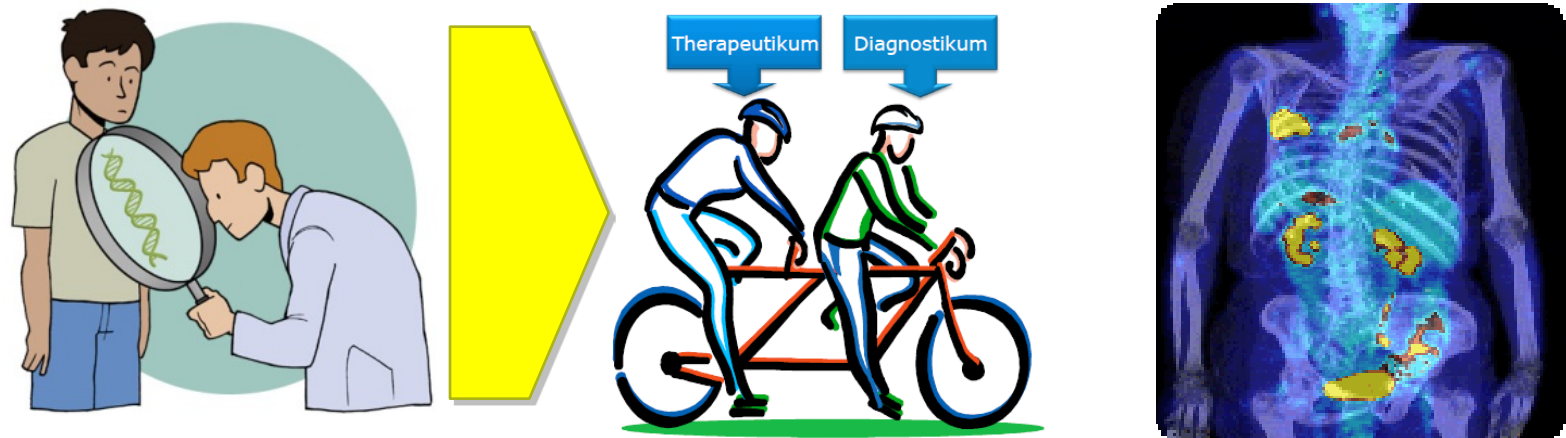
- Drug-eluting stents that open and prevent re-stenosis in coronary and peripheral arteries
- Bone grafting scaffold/sponge coated with a growth protein that promotes bone regeneration
- Implantable, programmable pump that delivers a drug/biologic in small, timely doses
- Implantable polymer wafer that releases a chemotherapy agent to a specific site
- Transdermal patch that transports drugs locally and systemically through the skin
- Pre-filled, metered dose syringe, injector or inhaler



Konvergenzbeispiele (2)

Drug / Diagnostic

- Screening test for the presence of a specific gene or protein coupled with targeted drug therapy
- Passive tracers as contrast agents for PET-scanner



Konvergenzbeispiele (3)

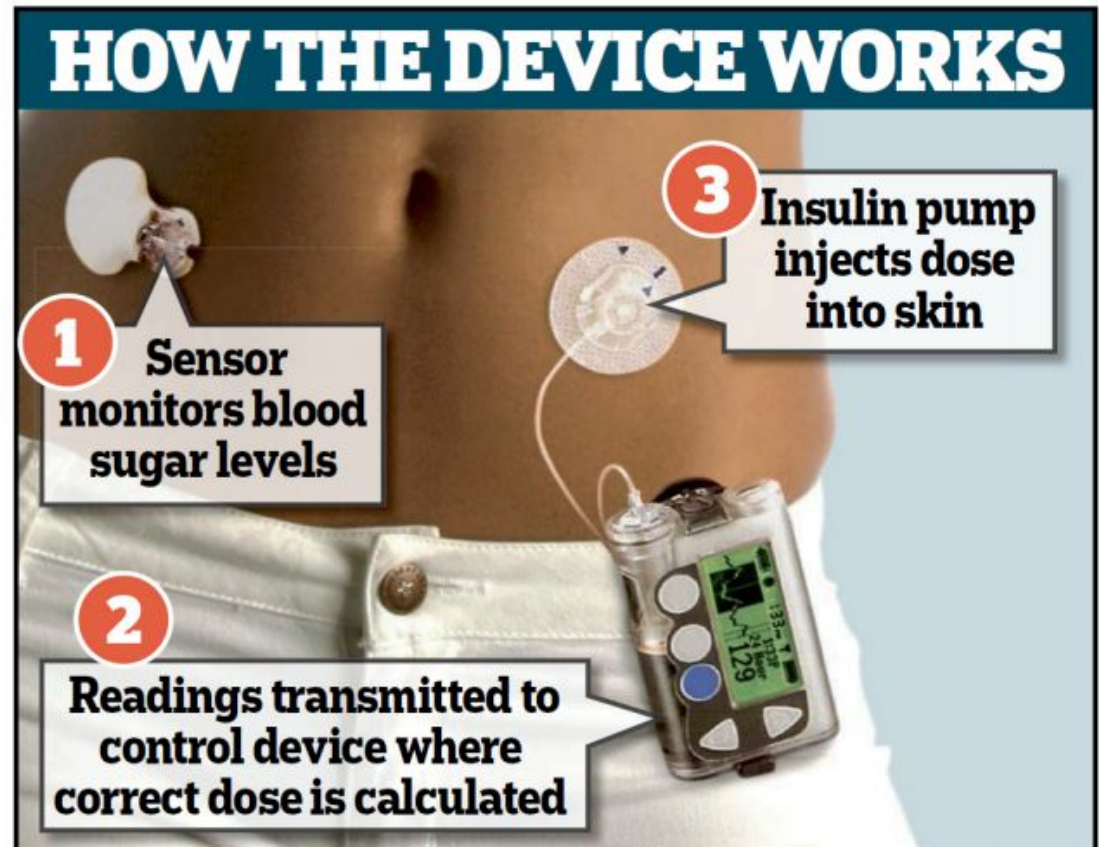
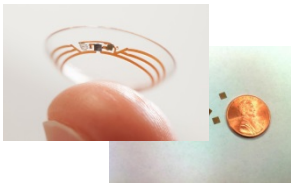
Drug / Device / Diagnostic

➤ Artificial pancreas

... works already well during the night

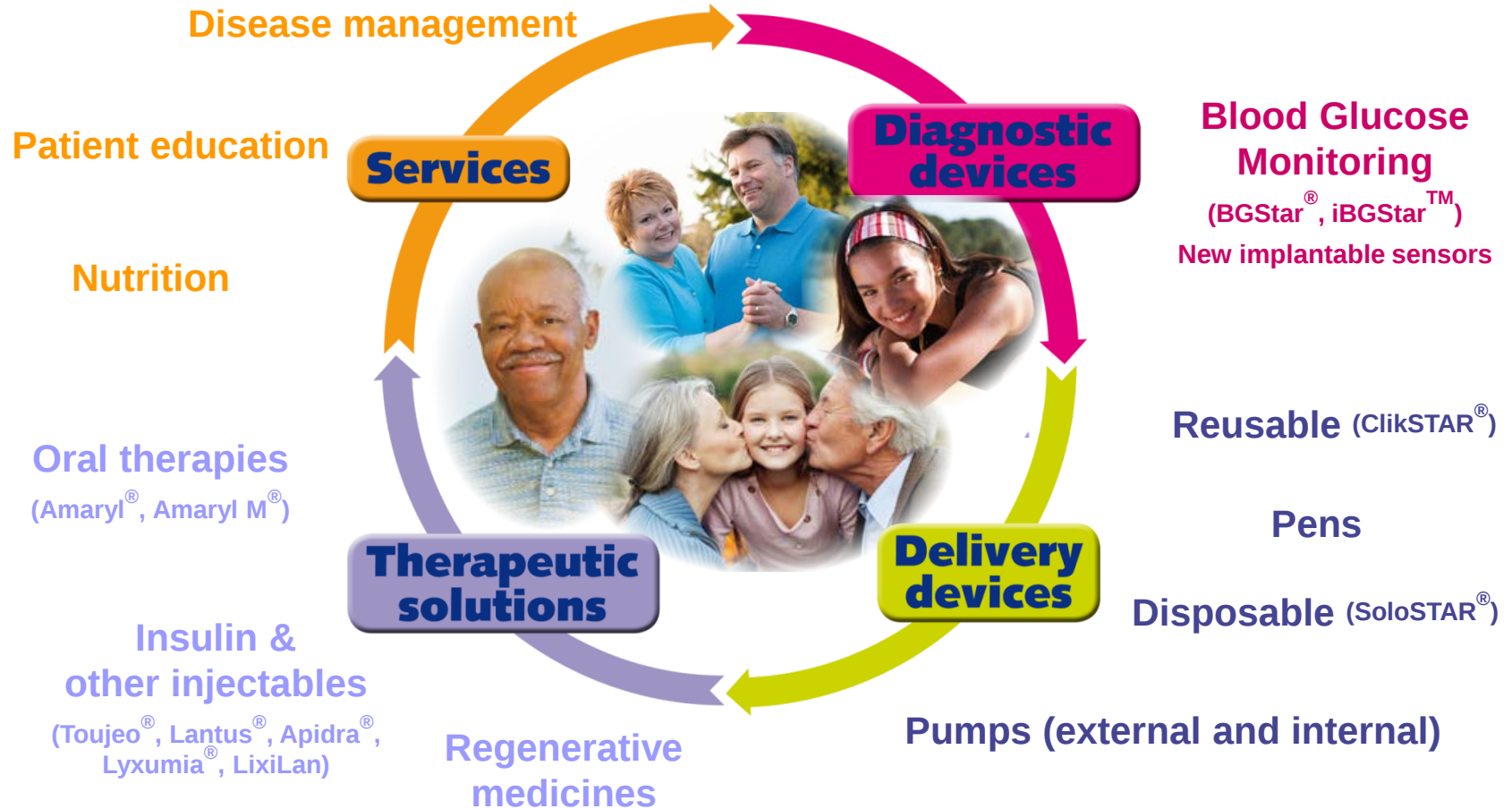
... but has some optimisation potential:

- Implanted sensors and pumps
- Two hormones (Glc/Ins)
- More rapid response times
- Etc.



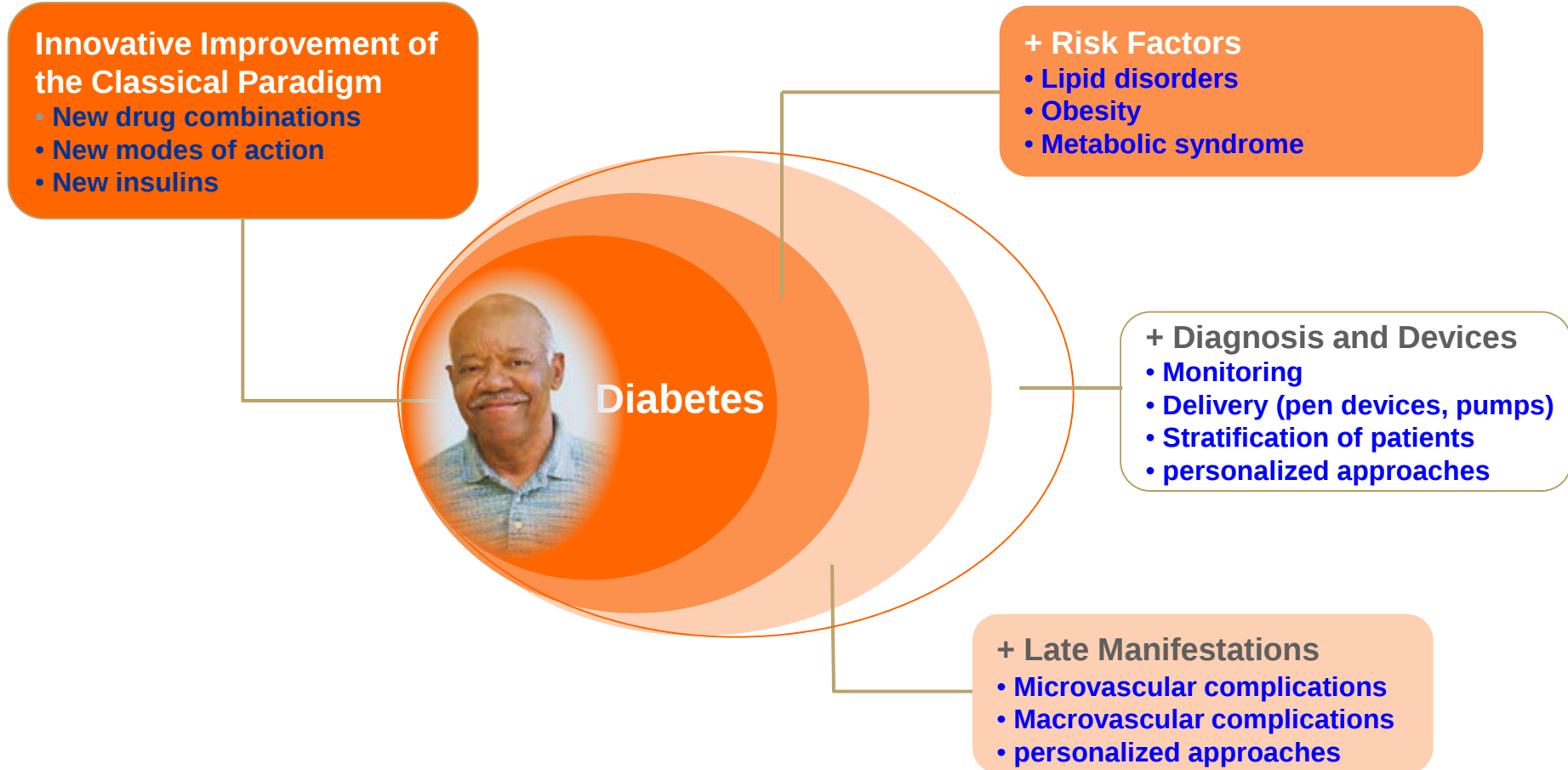
Integrierte Behandlungsansätze für Patienten

Das aktuelle Sanofi Diabetes Beispiel



Auswirkungen auf Forschung & Entwicklung

... am Beispiel Diabetes

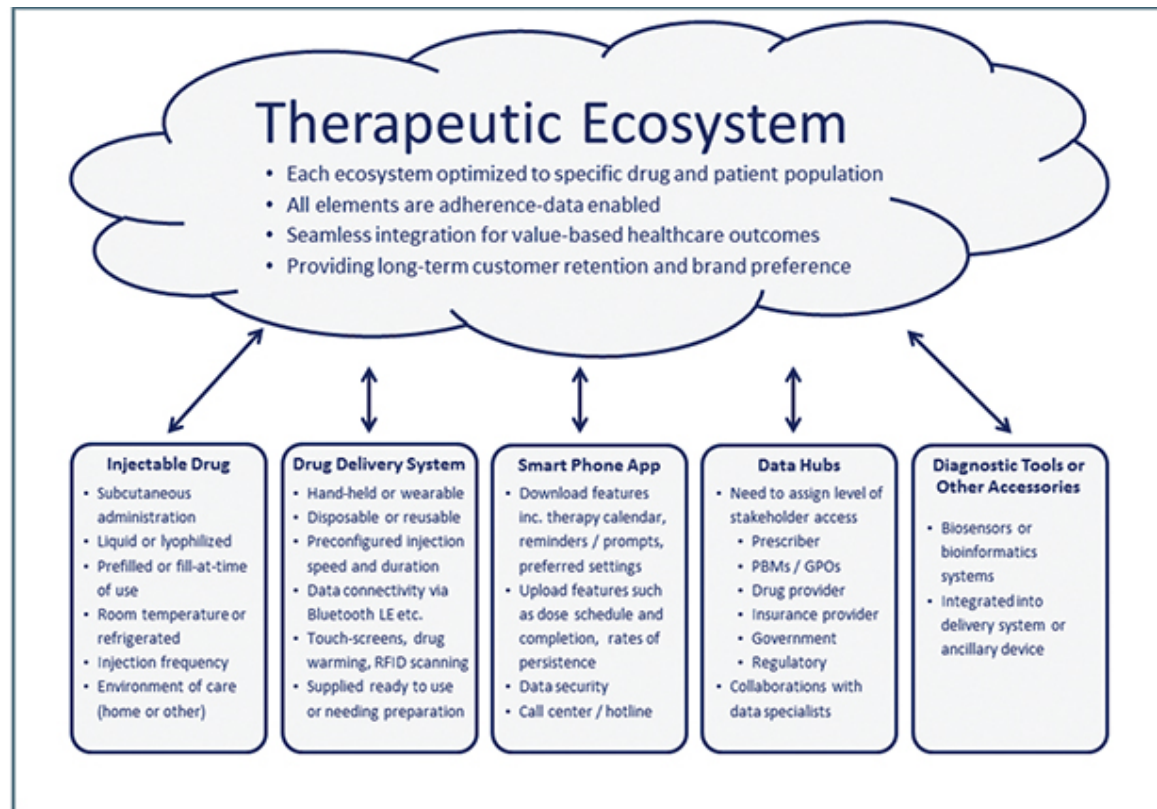


⇒ Pre-Diabetes and Diabetes are the “entry” into multiple diseases

Kooperationsansätze (1)

„Gretchenfrage“:

Can an integrated approach for patients be managed by one company alone („alles aus einer Hand“)?



Kooperationsansätze (2): Wer braucht Partner?

- Strong Emphasis on Diagnostics and Integrated Care



Johnson & Johnson

- Traditional Pharma Model



Partnering strongly required

Kooperationsansätze (3) – Wer sind potentielle Partner?

- As integrated care is getting more important new partnering options arise and there are numerous great companies out there

Boston
Scientific

 **Dako**
An Agilent Technologies Company

SIEMENS
Healthcare


essilor

 **GE Healthcare**

Baxter

 **LabCorp**
Laboratory Corporation of America


QIAGEN


DANAHER

 **B | BRAUN**
CardinalHealth

stryker®

...and many more.....

Example for diagnostics

Kooperationsansätze (4)

Four basic aspects for future co-operations:

- Each partner has to stick on its expertise and has to be accepted by the other(s)
- New „spirit“ in co-operations
- More intelligent incentives for all partners than only money
- Awareness of new players in the field

Kooperationsansätze (5) – Wer sind die neuen Player?



Nestlé Skin Health



NestléHealthScience



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