

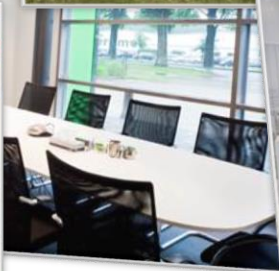


## “From Immuno Assay to an IVD Product”

Mike Martens, Scientific Business Executive



- ❖ Independent Company, founded in 1997
- ❖ Based in Wijchen, the Netherlands
- ❖ Internationally oriented (EU, US and JPN)
- ❖ 3500 m<sup>2</sup> facility
- ❖ Over 70 employees
- ❖ ISO13485:2016 certified
- ❖ FDA registered site (inspections in 2004, 2008, 2011 and 2016)



Full (immuno)  
Assay  
Development

IVDR Analytical  
Performance  
studies

Verification,  
Validation &  
Stability

Point-of-Care  
Test Services

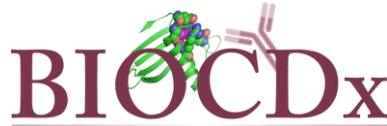
(Accusphere)  
Lyophilisation

## Our Manufacturing Services

Assembly of  
(Immuno) Assay  
Kits

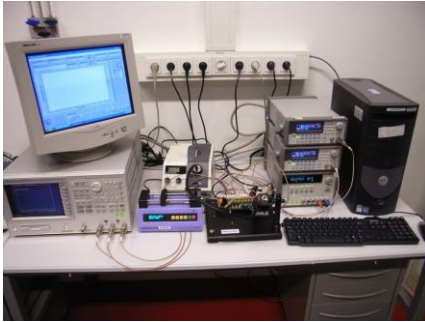
Bulk Production  
of Solutions &  
Beads

Product Filling,  
Capping &  
Labelling



and you...?

Lab model



## How Long?

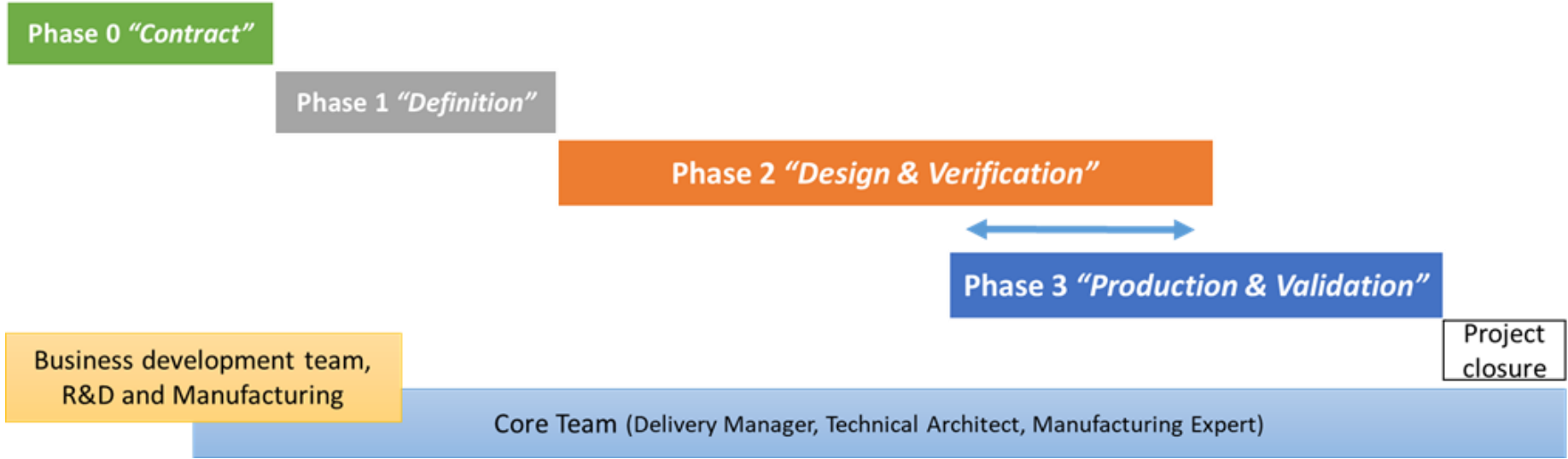


## > 10 years

Hand held analyzer



How we work

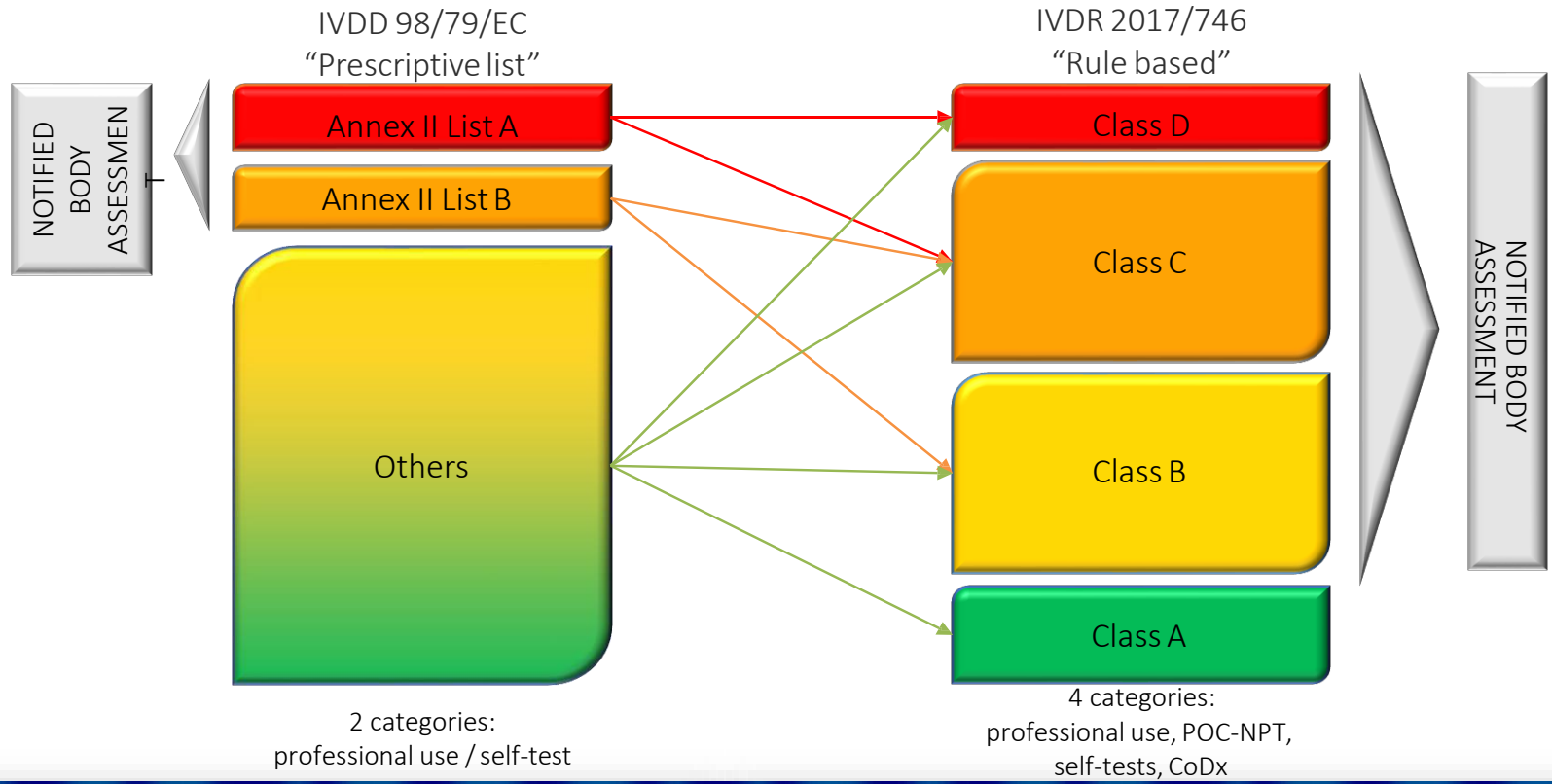


- ✦ Design Freeze
- ✦ Change control (documentation system)
- ✦ Manufacturability
- ✦ Validation of manufacturing processes
- ✦ Scale-up of manufacturing processes
- ✦ Supply chain of the different critical raw materials
- ✦ Regulatory landscape in the different countries



Phase	Description	# months	Hours				Total hours
			DT/DE	TA/DM	MFG staff	Other staff	
Definition	Pre-feasibility study	2	320	225		40	585
Design	Design Freeze	7	960	675	100	120	1,855
	Create phase 2 documents	7	240	60		15	315
Verification	Create plan(s) & 2 reviews	1		40			40
	1 lot @ R&D & testing	3	720	340	50	75	1,185
	Create report(s) & 2 reviews	1	10	40			50
Production	Update provisional MFG & QC docs	0.5	20		20	5	45
	3 lots @ MFG	3	480	290	1060	85	1,915
	Finalize MFG & QC docs	0.5	20		20	5	45
Validation	Create plan(s) & 2 reviews	1		40			40
	Testing	2	640	225	20	60	945
	Create report(s) & 2 reviews	1		40			40
Stability	After validation	1	160	40			200
<b>Total</b>		<b>16*</b>					<b>7,260</b>
	* Note: Items are done in Parallel						
					<b>Aantal manmaanden:</b>		<b>43</b>

# From IVD-D to IVD-R



A red rectangular box with rounded corners and a slight gradient, containing the text "Scientific Validity".

## Scientific Validity

**Scientific validity** of an analyte means the association of an analyte to a clinical condition or a physiological state;

A green rectangular box with rounded corners and a slight gradient, containing the text "Analytical Performance".

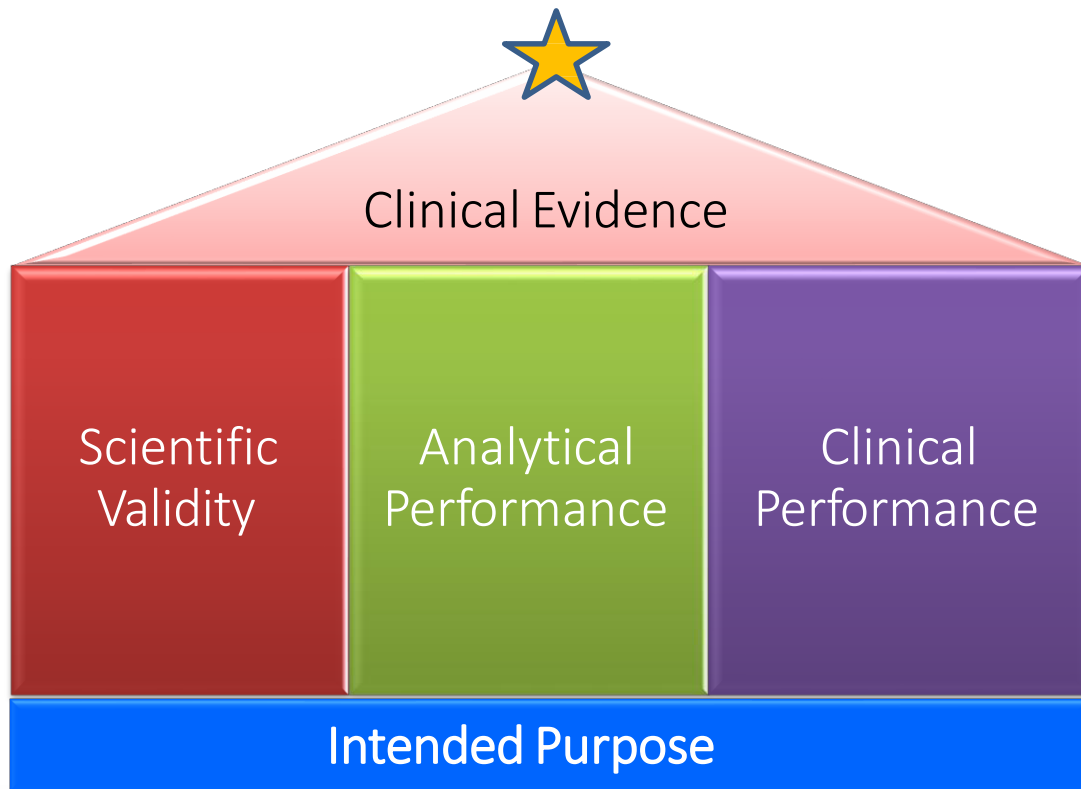
## Analytical Performance

**Analytical performance** means the ability of a device to correctly detect or measure a particular analyte

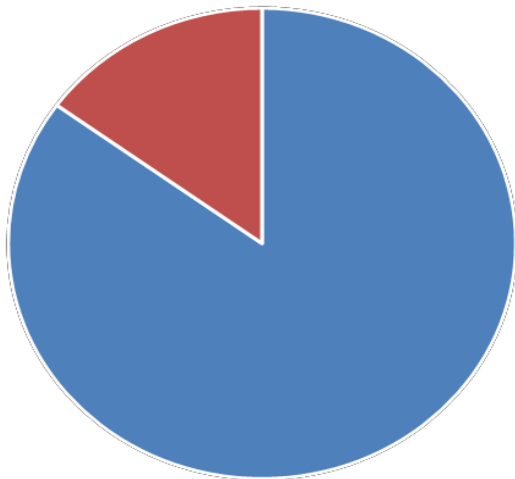
A purple rectangular box with rounded corners and a slight gradient, containing the text "Clinical Performance".

## Clinical Performance

**Clinical performance** means the ability of a device to yield results that are correlated with a particular clinical condition or a physiological or pathological process or state in accordance with the target population and intended user

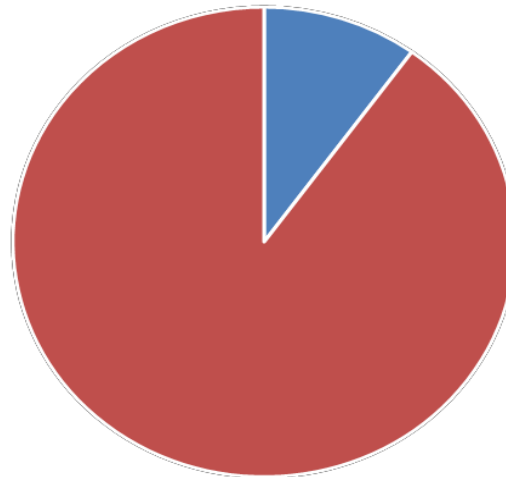


### IVD tests under IVD-D



■ self-certification (85%) ■ notified bodies (15%)

### IVD tests under IVD-Regulation



■ self-certification (10%) ■ notified bodies (90%)



**Thank You** Danke Merci Gracias  
**Bedankt** Obrigado ありがとう  
Tack Kiitos Takk Grazie Dziękuję

