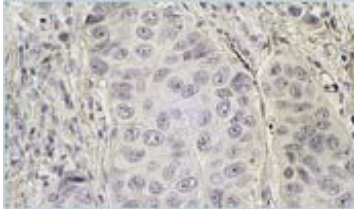
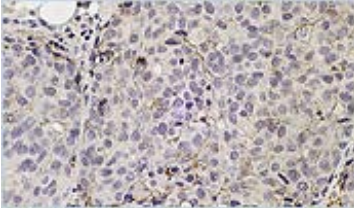
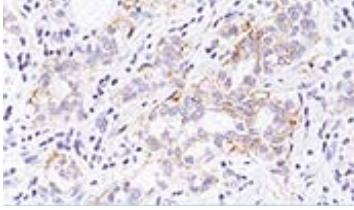
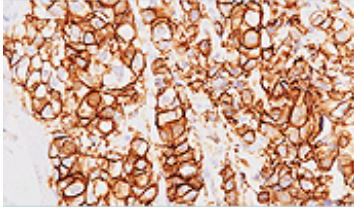
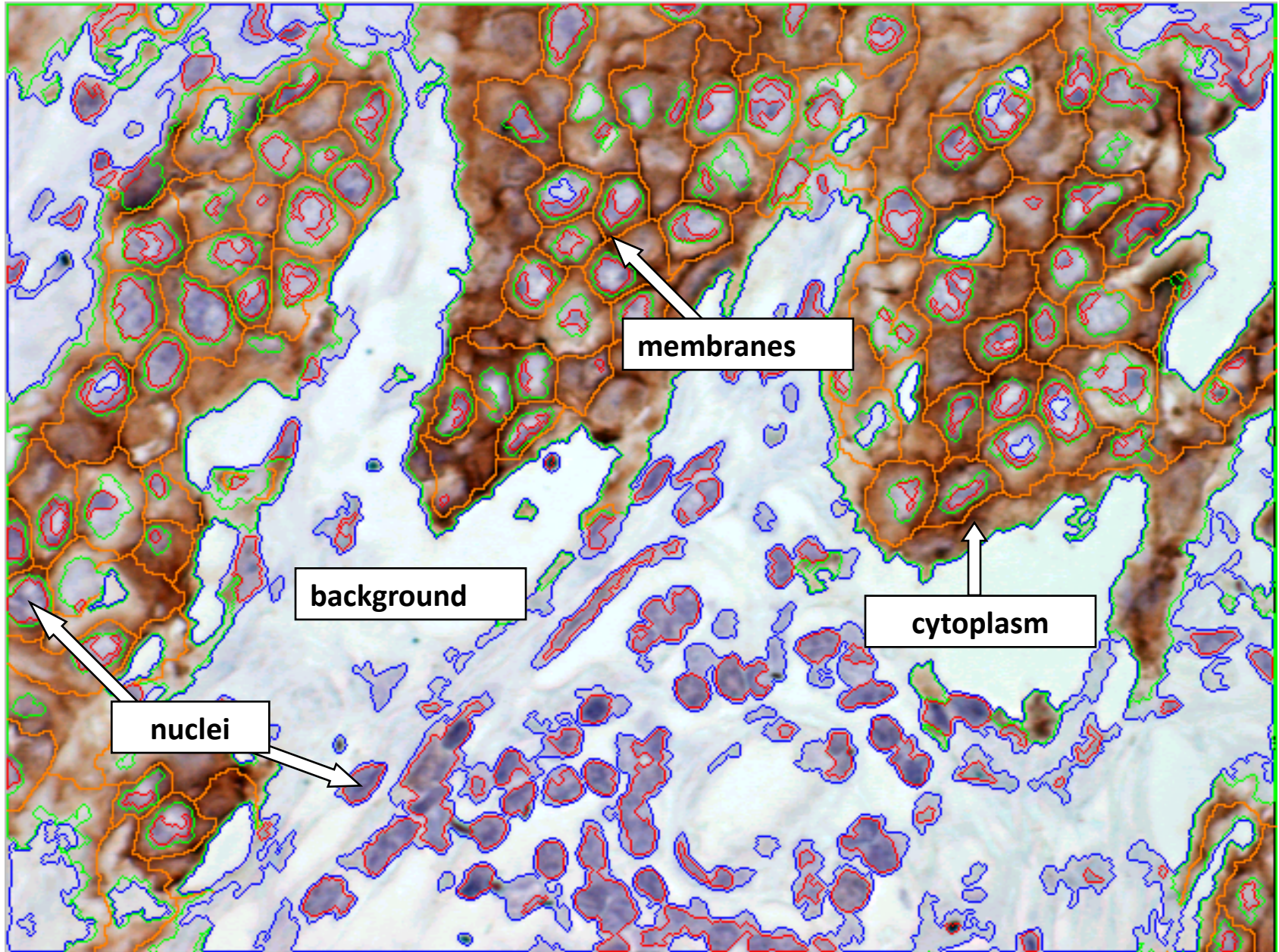


# HercepTest™ method

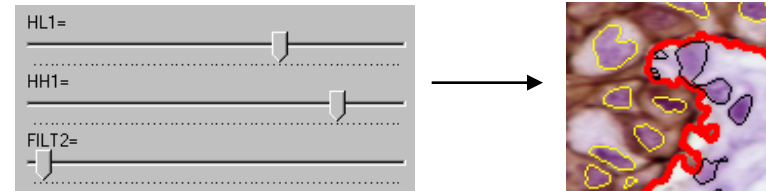
Staining Pattern	Score	HER2 Overexpression Assessment (Report to treating physician)	
No staining at all, or membrane staining in less than 10% of the tumor cells is observed.	0	Negative	
A faint/barely perceptible membrane staining is detected in more than 10% of the tumor cells. The cells are only stained in part of their membrane.	1+	Negative	
A weak to moderate staining of the entire membrane is observed in more than 10% of the tumor cells.	2+	Weakly positive	
A strong staining of the entire membrane is observed in more than 10% of the tumour cells.	3+	Strongly positive	

# Her2neu expression – segmentation



# Her2neu expression – workflow

The user visually sets segmentation parameters



The image processing server computes the measurements for all relevant images and puts the measurements in the database

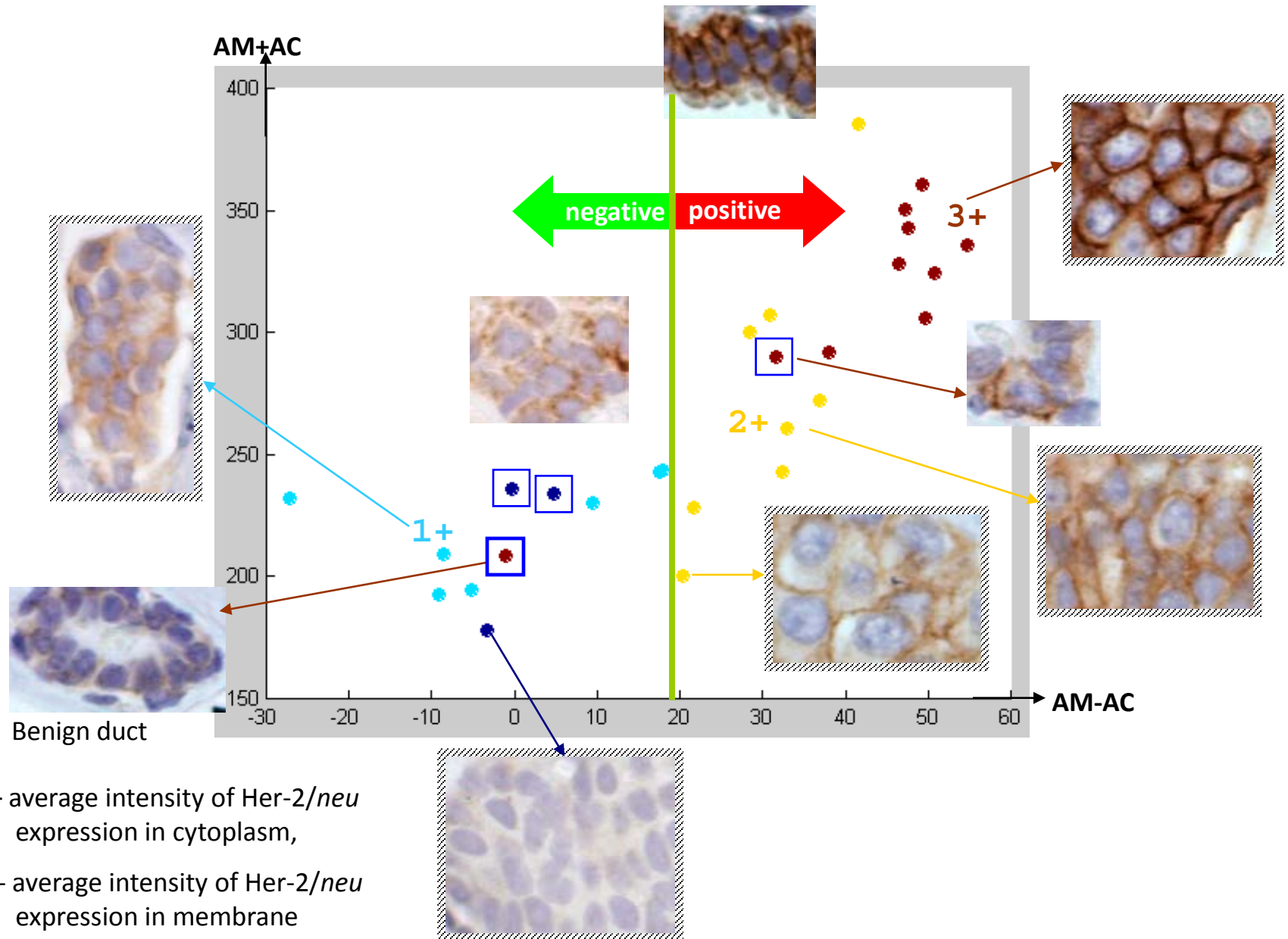
Image #	Average intensity in cytoplasm	Area of cytoplasm (in%)	Average intensity in membrane	Area of membrane (in%)
1	...	...	...	...
...	...	...	...	...
N	...	...	...	...

The user can view the distribution of measurements and request searches of images by the ranges of measurements

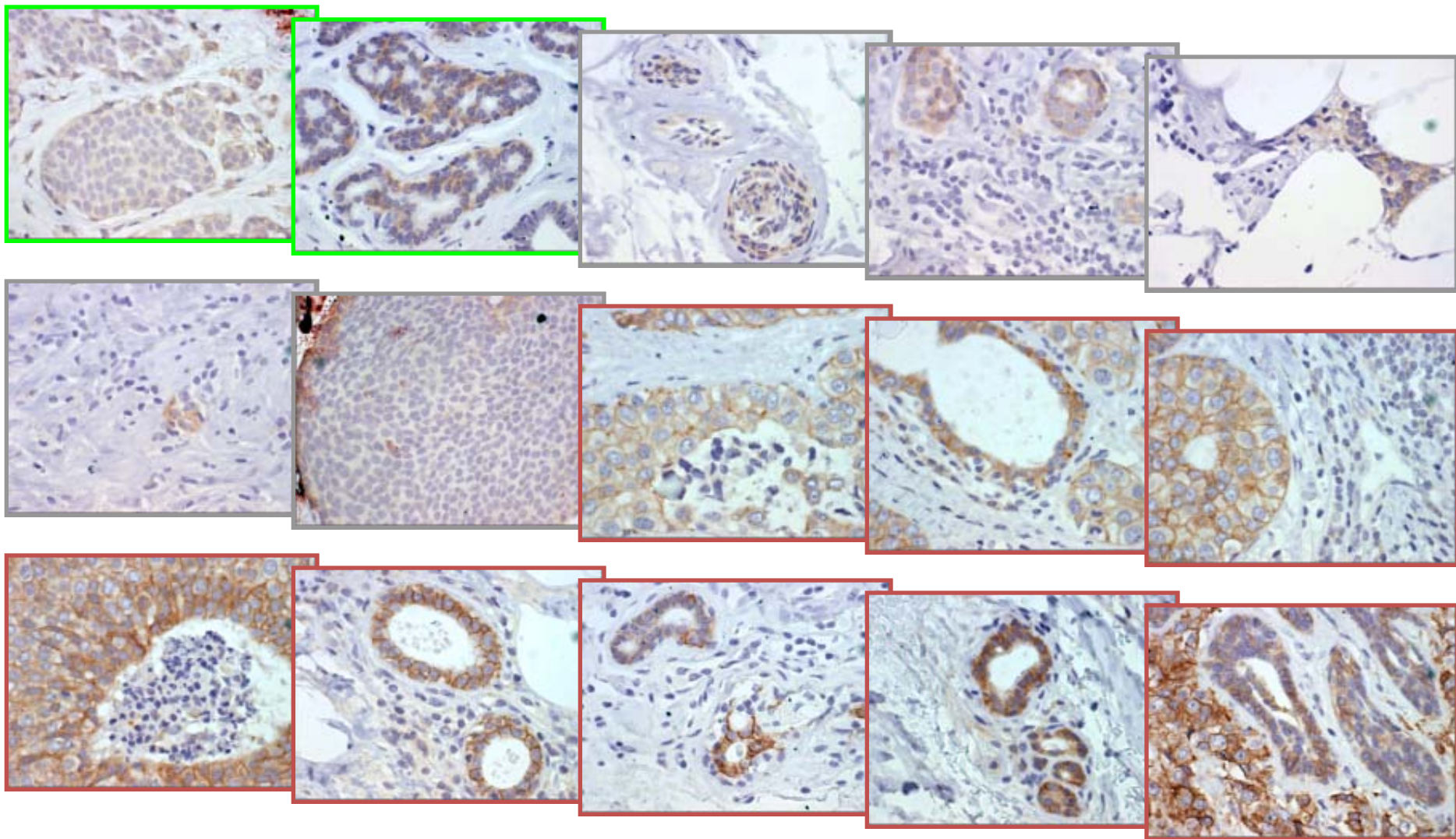
(see next slides)



# Scatterplot of images in feature space



# Sorting images by computed classification and membrane intensity



0+ 1+ 2+ 3+