

Proteomics Perspective in Public Health

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Genomics and Proteomics

- Functional genomics
- Proteomics

Profiling proteomics

Functional proteomics

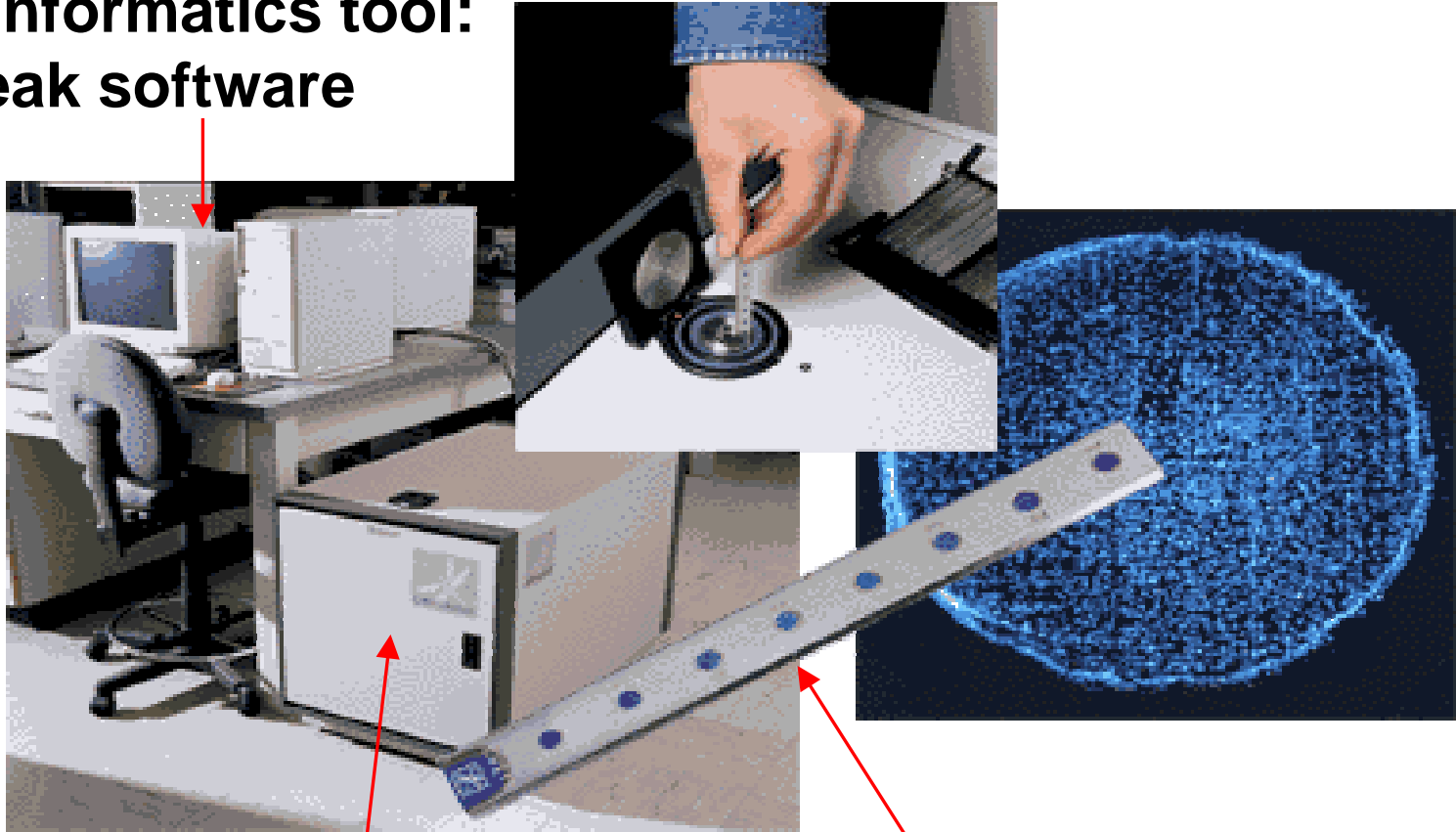
Structural proteomics

Proteomics methods

- Sample
LCM
- 2DE-Gel/2D-HPLC
- MALDI-TOF-MS
Q-STAR/TOF-MS
- SELDI-TOF-MS

ProteinChip® Technology

3. Bioinformatics tool:
Peak software



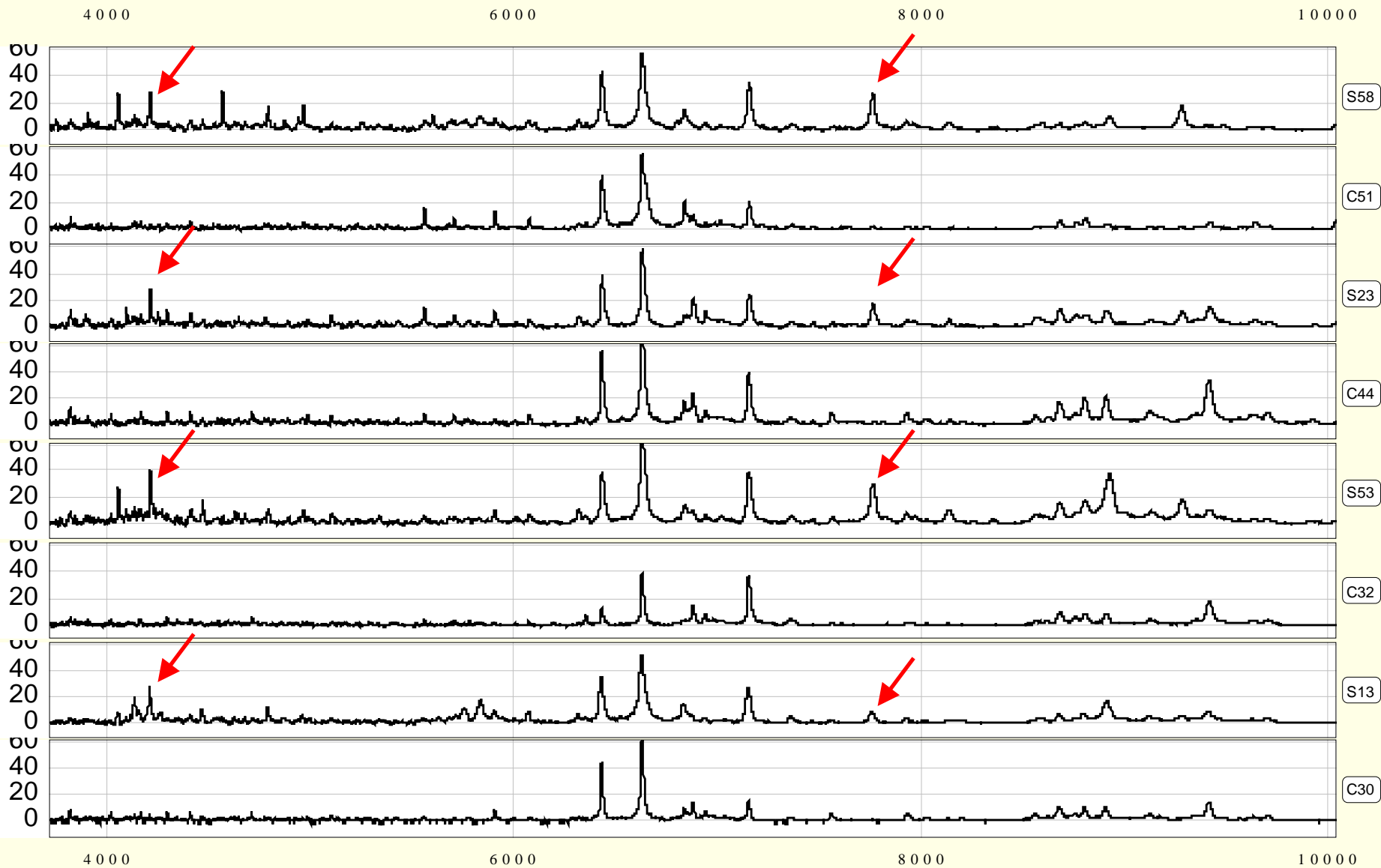
2. Protein detection tool:
LDI TOF-MS

1. Protein capturing tool:
ProteinChip array

Proteomics Applied to Public Health

- Lung Cancer
- SARS
- HIV

Lung caner

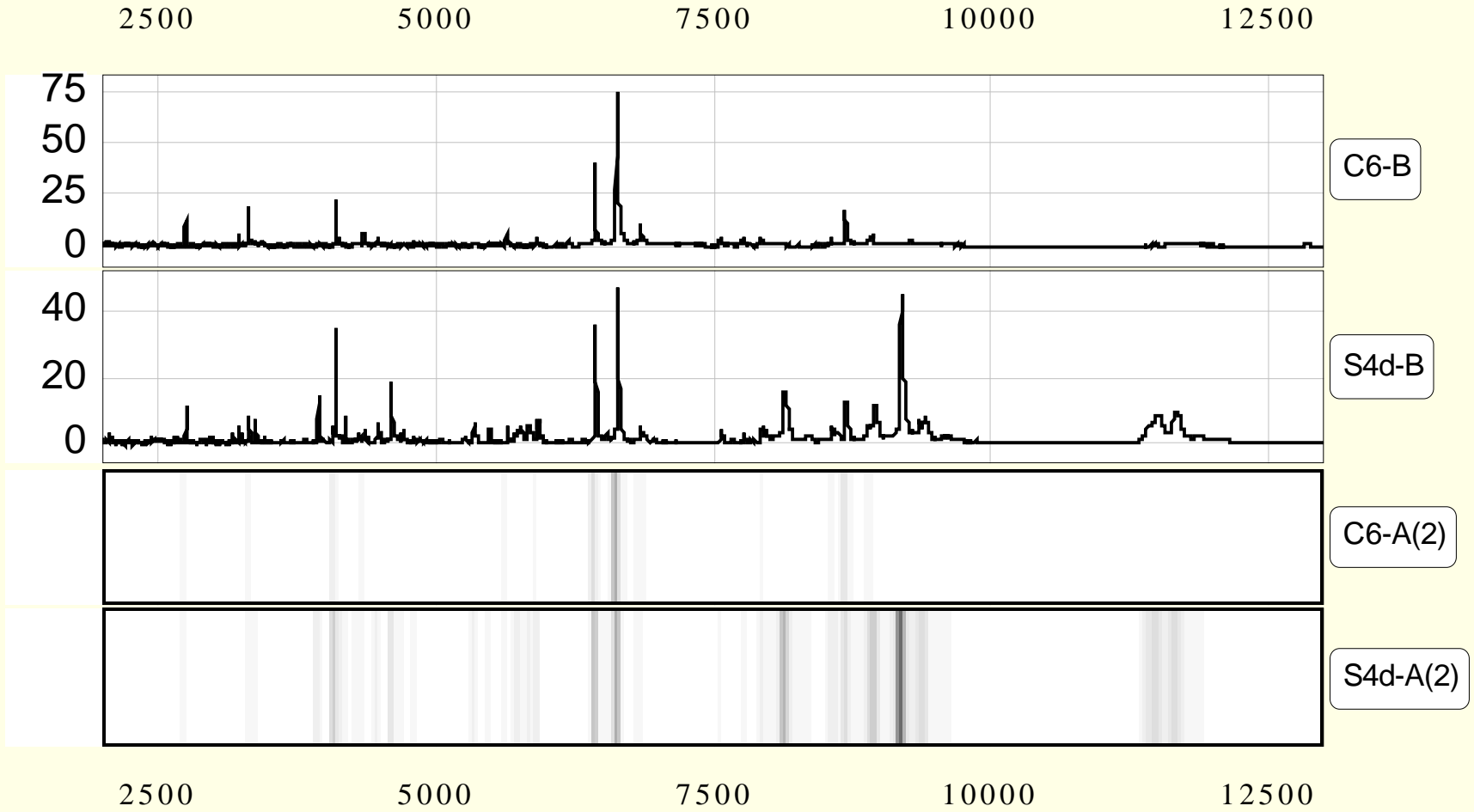


Protein Fingerprinting Distinguish SARS and Non-SARS

Extremely Specific and Sensitive Detection of SARS (1-7 days of onset)

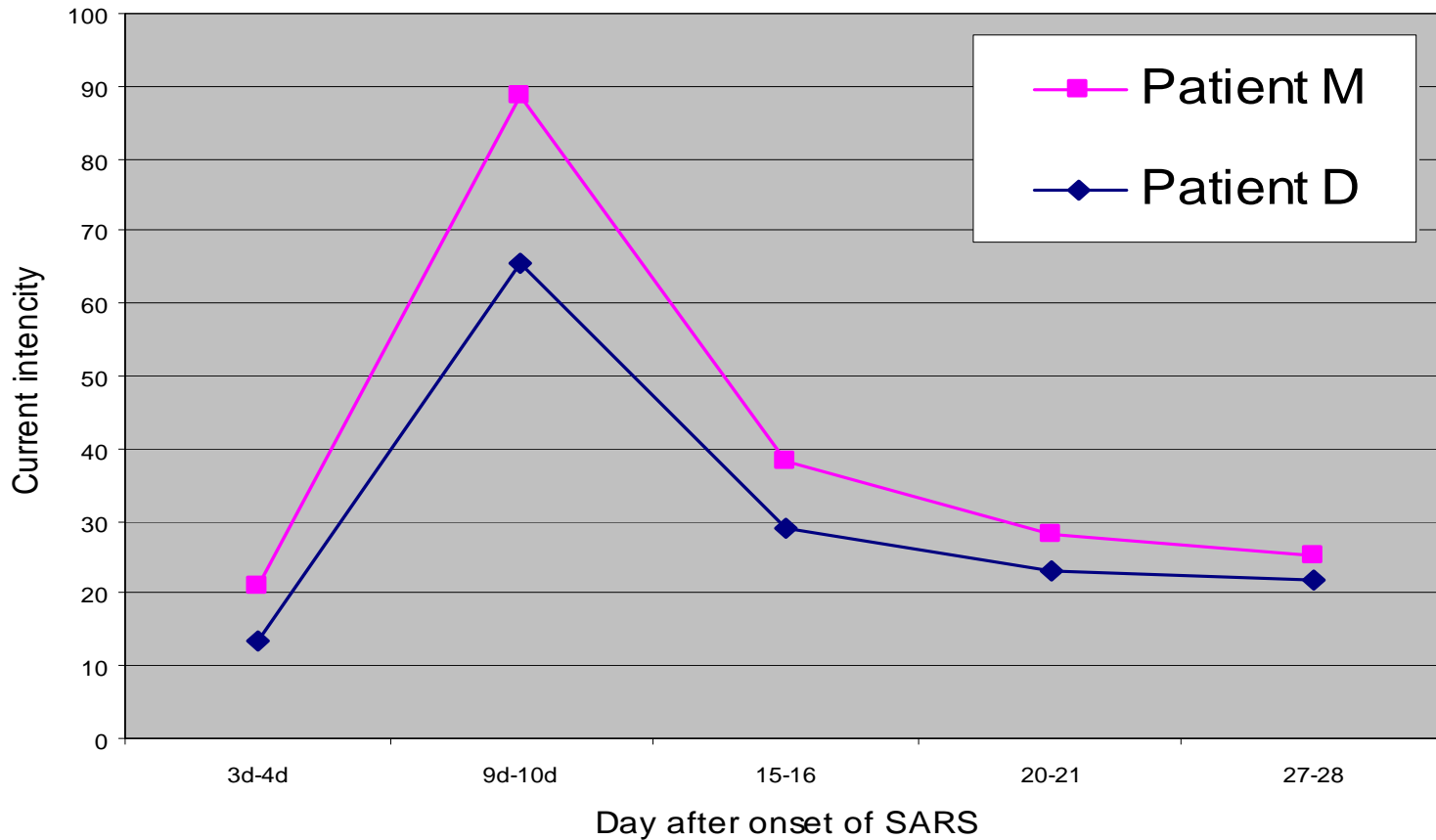
<u>Biomarkers</u>	<u>Cases</u>	<u>Sensitivity</u>	<u>Specificity</u>
DY3 DY8 DY11 DY4	Training	100.0% (37/37)	97.3% (72/74)
	Test	97.3% (36/37)	91.8% (67/73)

Biomarkers over-expressed in SARS

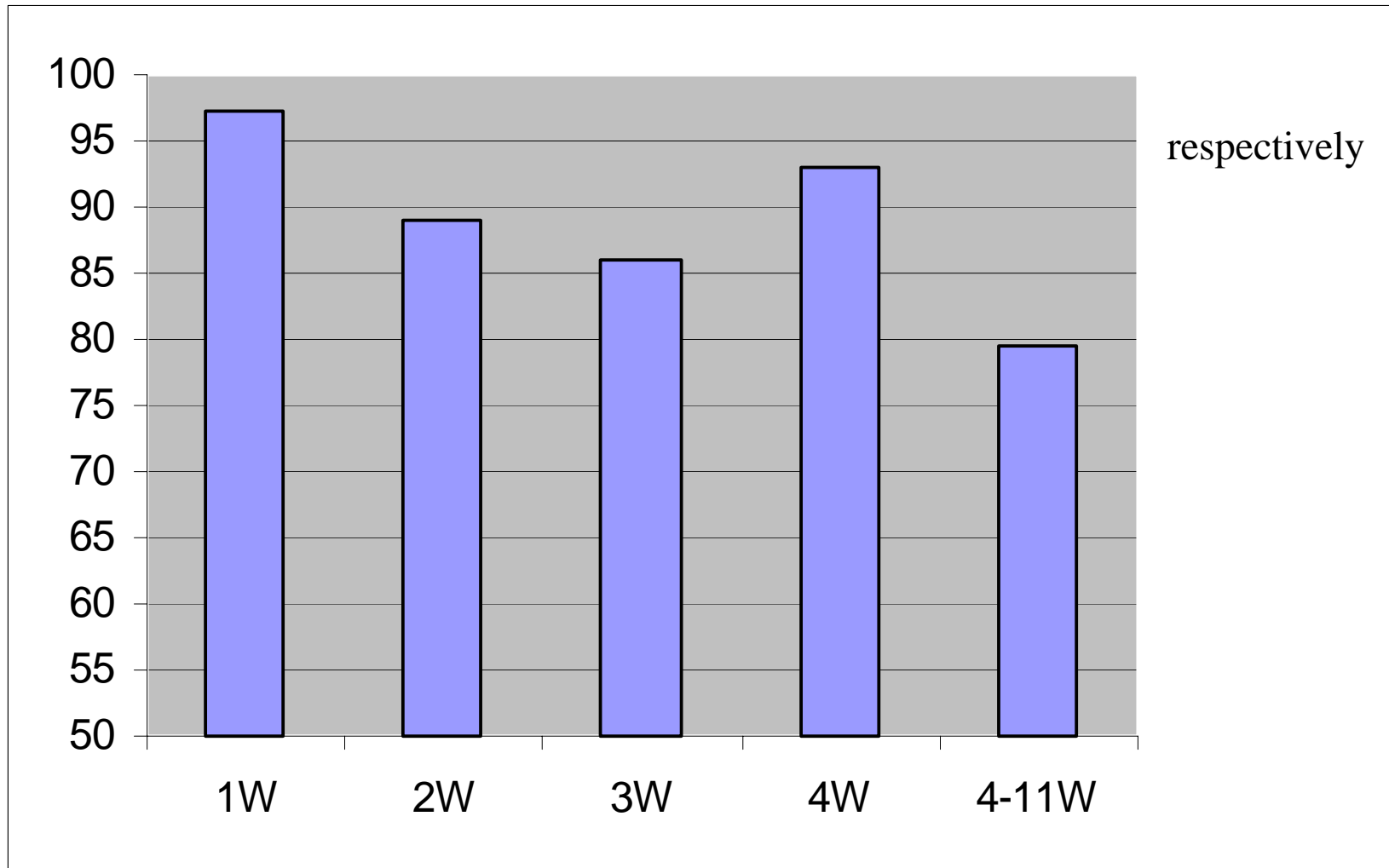


Tendency of DY3 Biomarker in SARS Patients

Tendency of DY3 Biomarker in two SARS Patients



By using this model to test SARS in 2, 3, 4 and >4 weeks, the positive results were 89.09% (49/55), 86.0% (43/50), 93.10% (27/29) and 79.49% (31/39).



- HIV & AIDS and proteomics
- Toxicological proteomics