



ABL

Advanced
Biological
Laboratories

Diagnostics

ABL DIAGNOSTICS

INTRODUCING THE

DEEPCHEK® HPV MESSENGER RNA GENOTYPING KIT

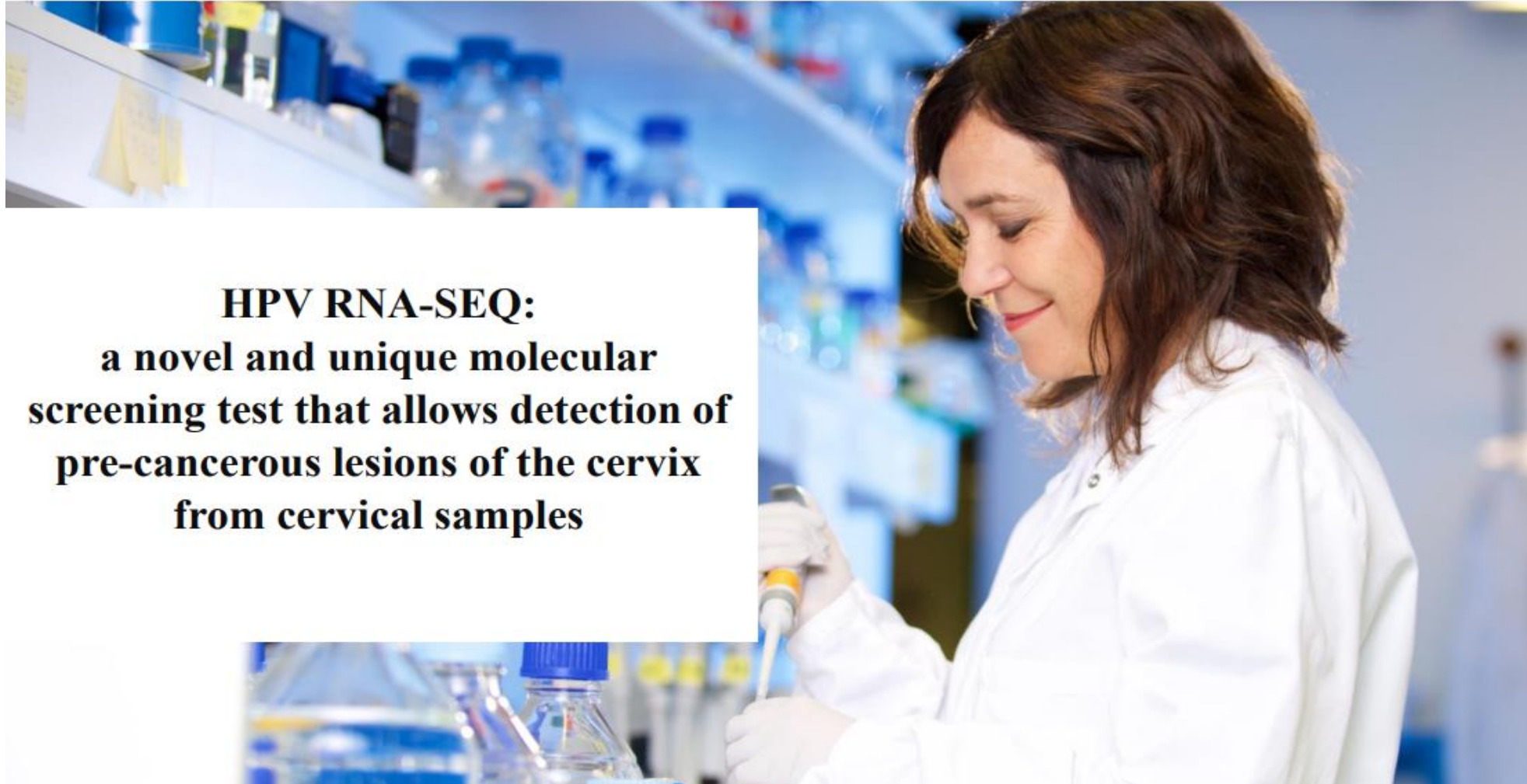


ISIN code : FR001400AHX6 / ABLD

For research use only



Institut Pasteur



**HPV RNA-SEQ:
a novel and unique molecular
screening test that allows detection of
pre-cancerous lesions of the cervix
from cervical samples**

5 PRODUCTS IN ONE



DeepChek[®] HPV messenger RNA Genotyping Kit



DETECTS HPV RNA



QUANTIFIES HPV RNA



GENOTYPES HPV BY
SEQUENCING



MARKER OF ACTIVE
INFECTION



PRECANCER LESIONS
DETERMINATION

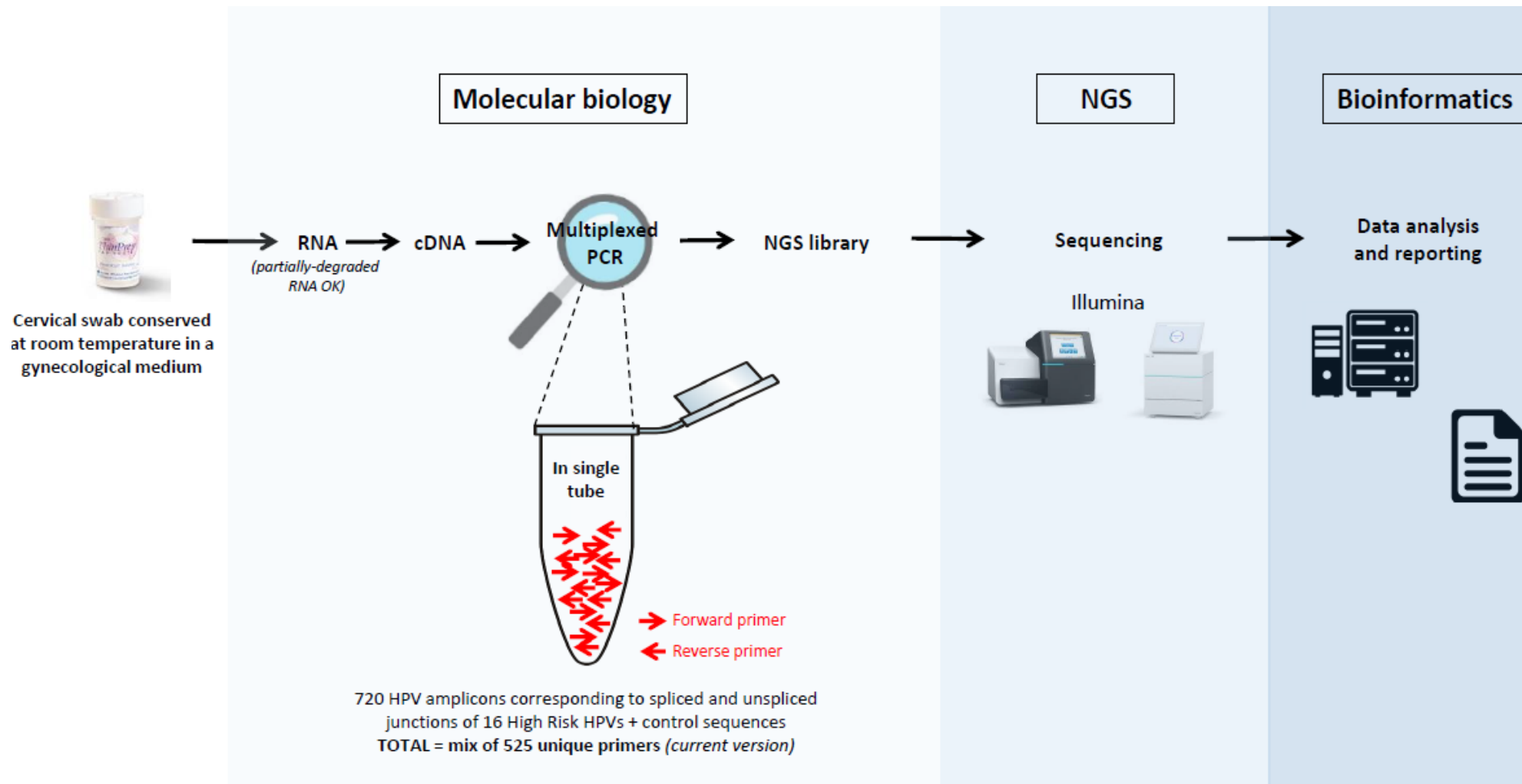
Molecular test



Cytological test

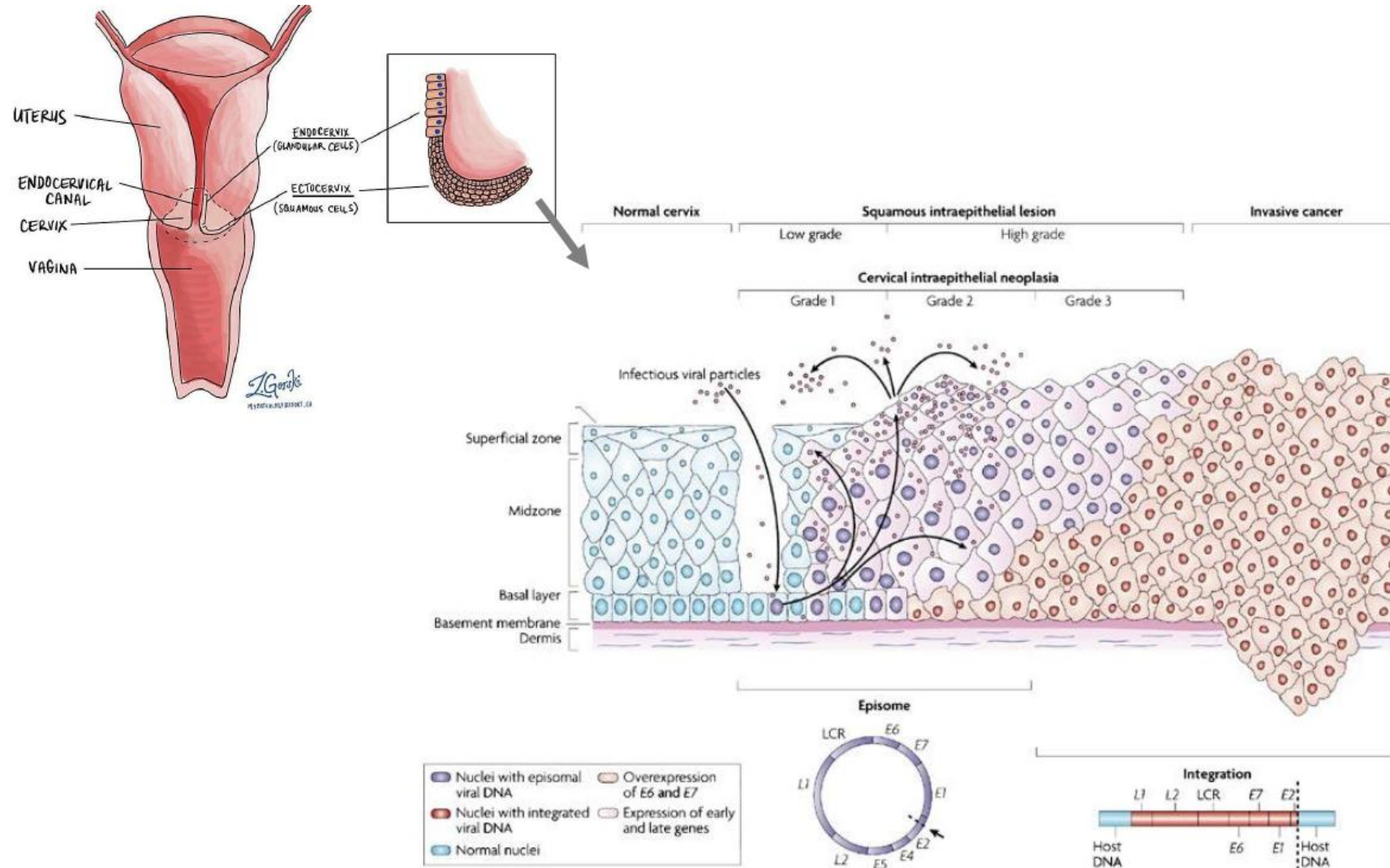


TEST IMPLEMENTATION



HPV-RNA-Seq employs a targeted NGS methodology to generate RNA sequencing data from standard cervical swabs.

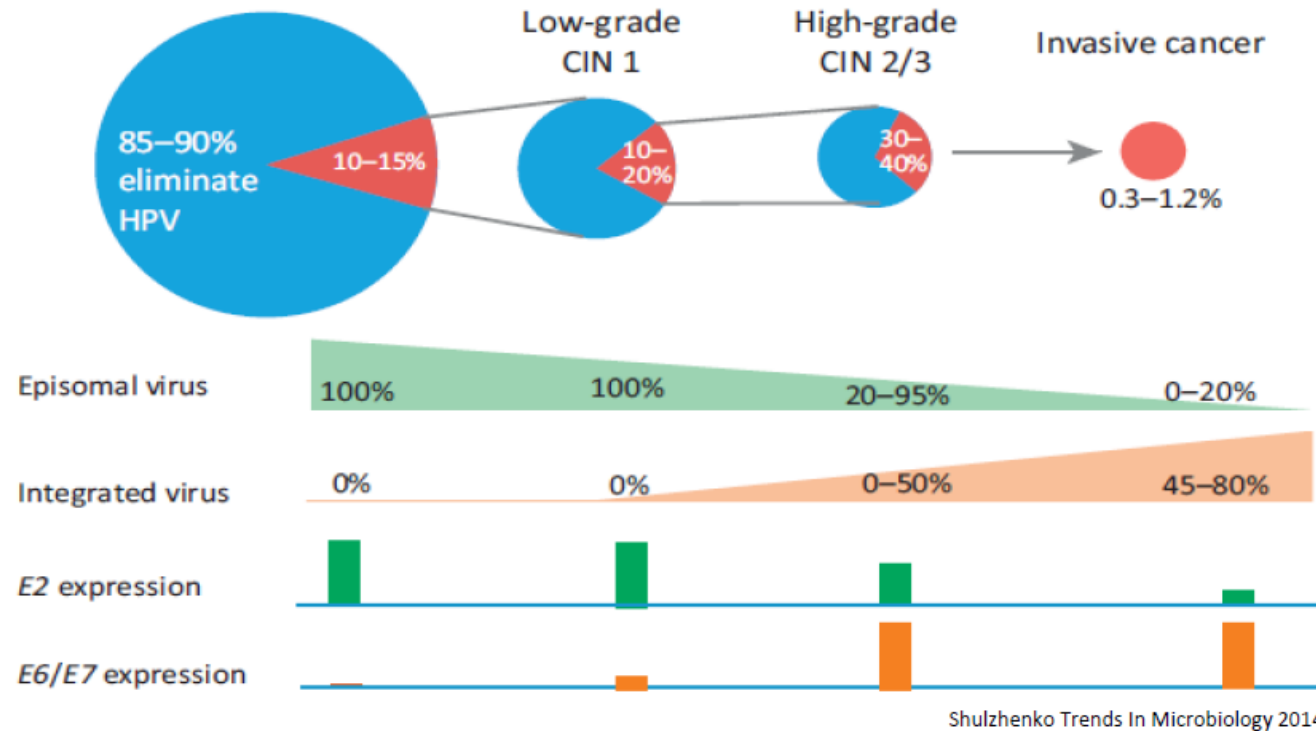
HPV Infection and Cervical Cancer Progression



Woodman et al. *Nature Reviews Cancer* 7, 11–22 (January 2007) **Nature Reviews** | **Cancer**

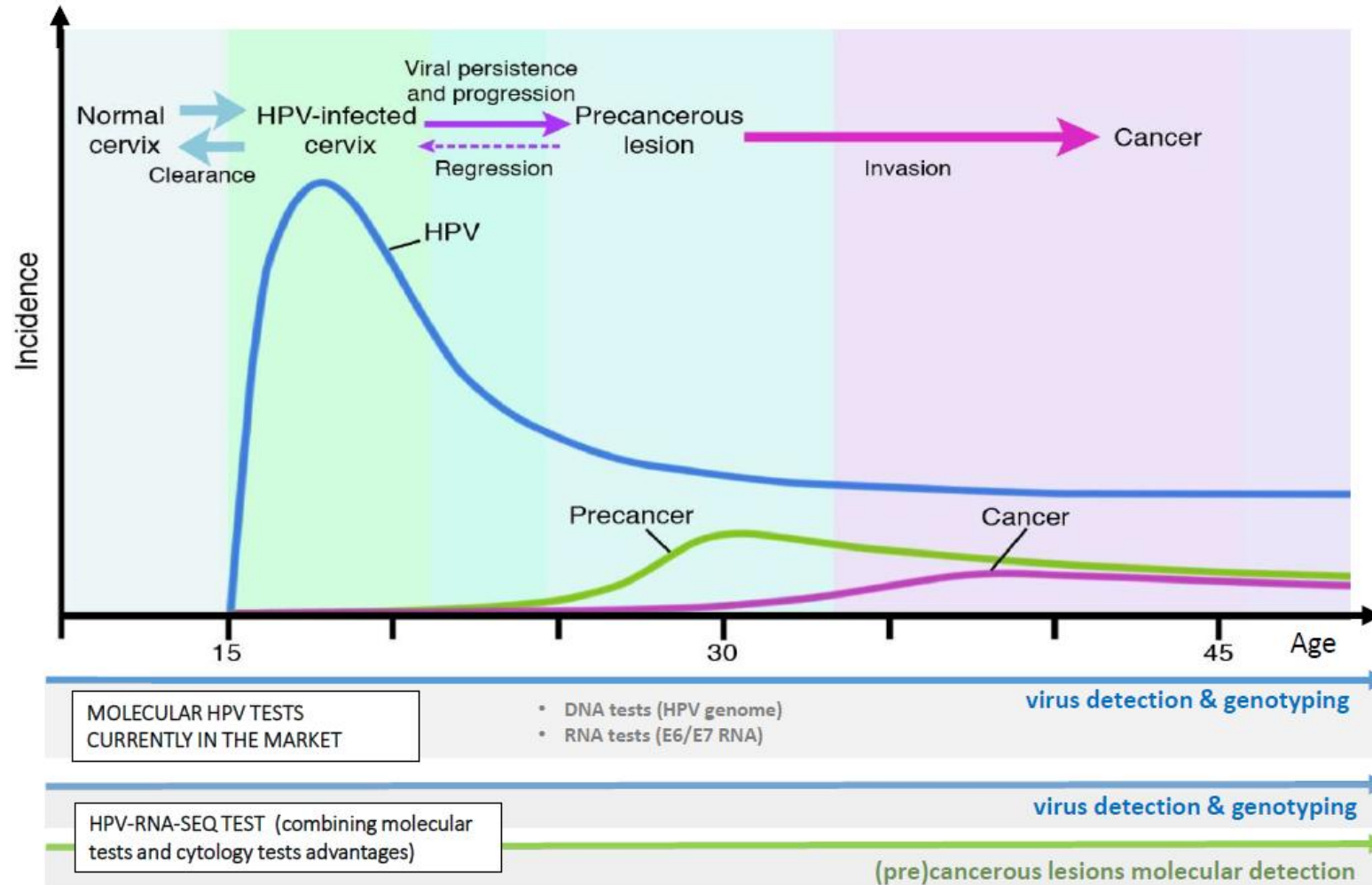
For Research Use Only

HPV Infection and Cervical Cancer Progression



Gene expression balance could serve as a molecular marker for different stages of HPV infection, with E6 and E7 genes associated with the cancerous state.

HPV Infection and Cervical Cancer Progression

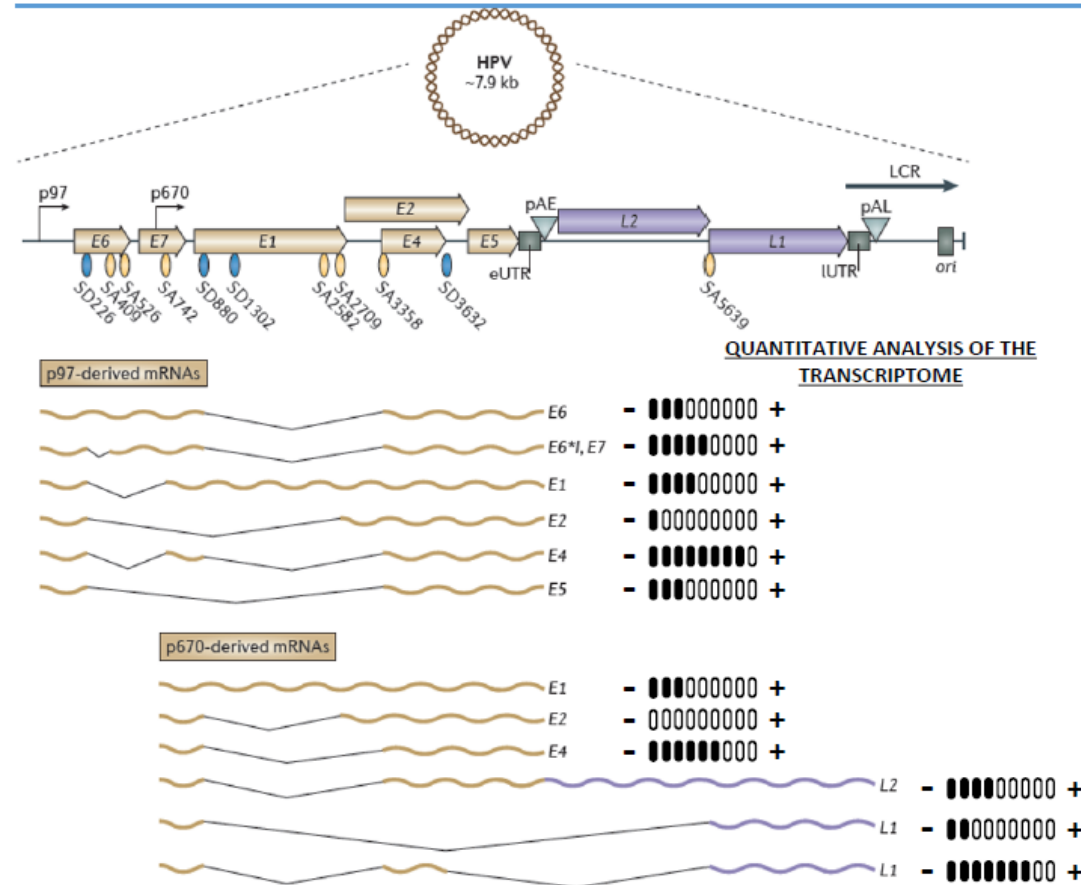


**HPV-RNA-Seq combines the advantages of molecular HPV tests and cytological tests:
HPV detection & genotyping + precancerous lesion molecular detection**

HPV-RNA-Seq

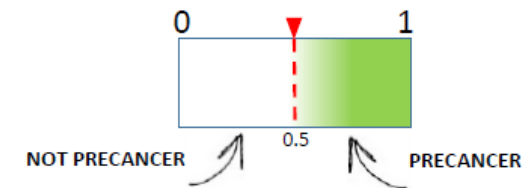


From data to interpretation : an RNA balance into a score

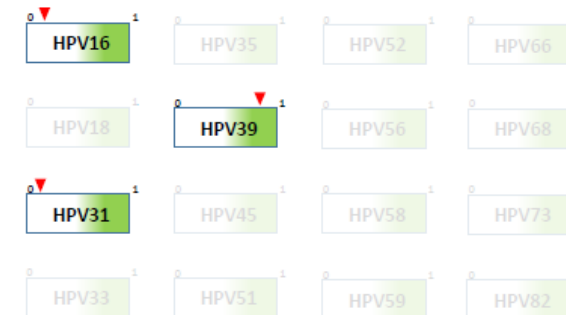


INTEGRATION OF THE RNA
BALANCE
INTO A SCORE
(logistic regression model)

$$\pi = \frac{1}{1 + e^{-(\beta_0 + \beta x)}}$$



EXAMPLE



Patient positive for: HPV16, HPV31 and HPV39
Precancerous markers found for: HPV39

HPV-RNA-Seq detects a specific set of HPV transcripts quantitatively and combines this data into a logistic regression score that predicts the presence of lesions in a sample.

HPV-RNA-Seq



Gynie: the HPV-RNA-Seq software

Results by patient

Copy CSV Excel PDF Print Show 10 entries Search:

	SampleName	Status	prediction	QC nb_HSK_genes	HPV detection & genotyping HPV_detected	HPV_covered	HPV_Not_HSIL	HPV_HSIL	max_score
1	Cytics-C6-01_S1_001	Multi-infected	HSIL	7	16,73,56	16		16	0.911968796519149
2	Cytics-C6-04_S4_001	Multi-infected	HSIL	13	16,18	16		16	0.699049010869685
3	Cytics-C6-06_S6_001	Mono-infected	HSIL	12	16	16		16	0.534739130322608
4	Cytics-C6-11_S11_001	Mono-infected	HSIL	23	16	16		16	0.559753368417216
5	Cytics-C6-13_S13_001	Multi-infected	HSIL	15	68,16,73	73		73	0.55603752426824
6	Cytics-C6-21_S21_001	Multi-infected	HSIL	13	16,31	16		16	0.633262497226744
7	Cytics-C6-22_S22_001	Multi-infected	HSIL	10	16,73,31,59	16		16	0.723455266706626
8	Cytics-C6-24_S24_001	Multi-infected	HSIL	5	16,52,18	16		16	0.67009129470943
9	Cytics-C6-29_S29_001	Multi-infected	HSIL	16	16,73,18,59	73		73	0.563945414032286
10	Cytics-C6-30_S30_001	Multi-infected	HSIL	14	16,18,31	16		16	0.825781293019552

Showing 1 to 10 of 95 entries

Previous 1 2 3 4 5 ... 10 Next

Lesion prediction

For Research Use Only

ABL

Advanced
Biological
Laboratories

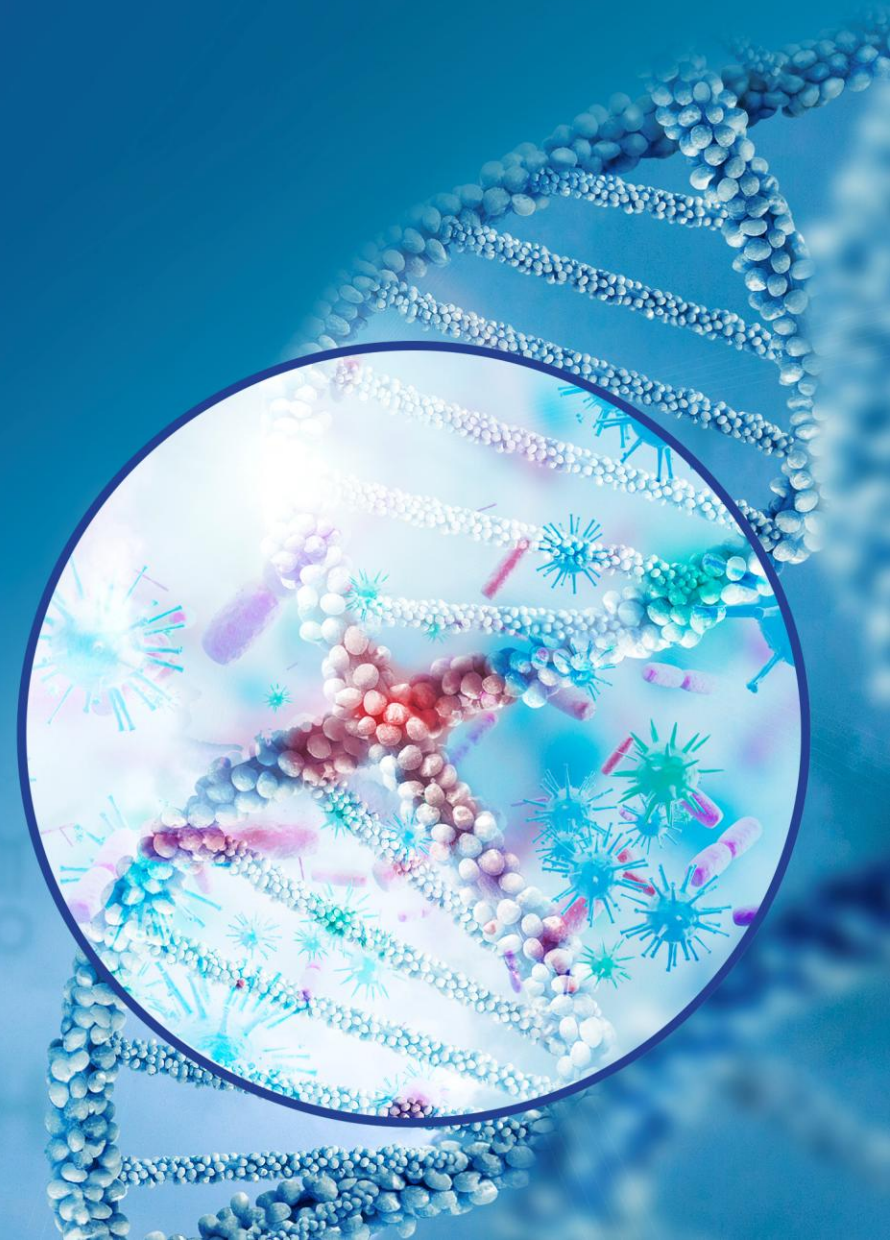
Diagnostics

THANK YOU!

Any question?

www.abldiagnostics.com

contact@abldiagnostics.com



For Research Use Only