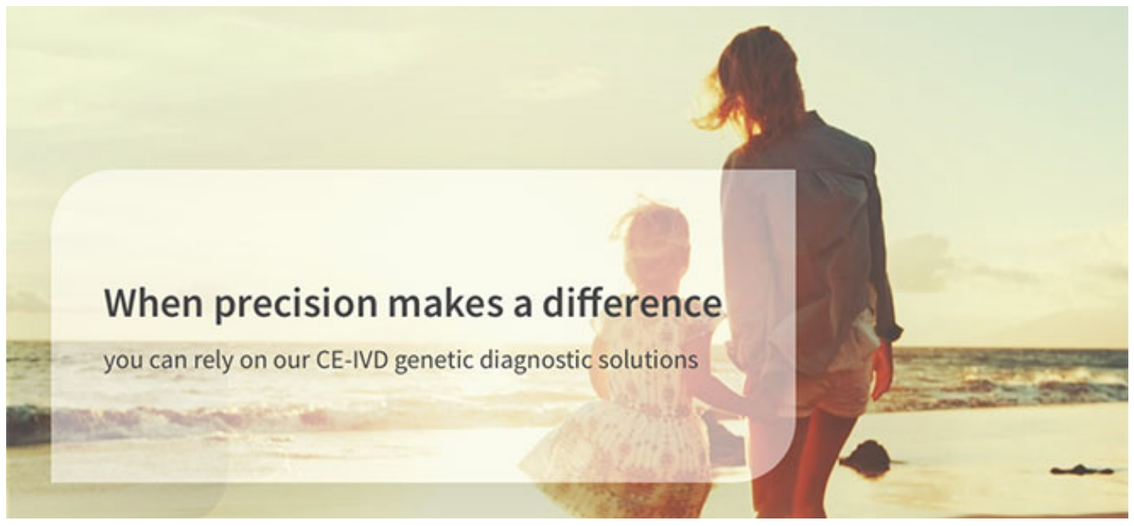
4bases

Advanced diagnostic solutions in pharmacogenetics, oncology and genetic diseases

4bases is certificated ISO 13485 and produces CE IVD kits ensuring diagnostic compliance



Precision

Sensitivity, Specificity, Accuracy and Precision of our tests must exceed 99%

Quality

There is no quality without certification. 4bases is ISO13485:2016 certified

Innovation

We give our contribution to the progress of life sciences and to the development of new products

Patients first

The success of our company is based on our capability to improve patients' lives

www.4bases.ch

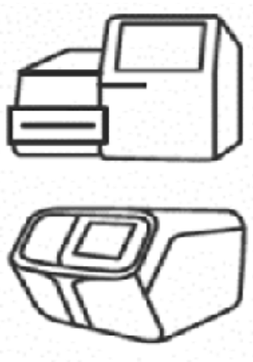
Fast and Easy Workflow

DNA samples

Library generation with 4bases kits

Turn-around time 4-6 h

Hands-on time < 2h



Sequencing (Illumina, IonTorrent)

Data analysis with varsomeclinical

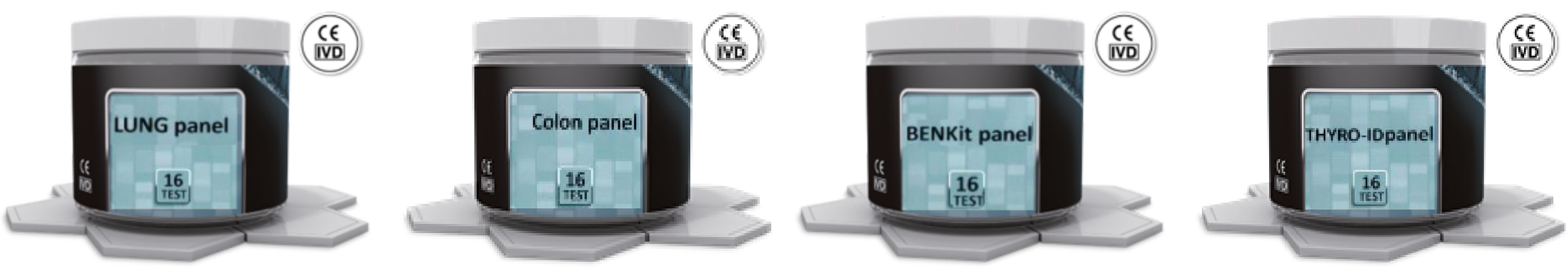
~ 15 min/sample

Results

ONCOLOGY panels

Profiling of somatic mutations in cancer tissues through a molecular protocol based on NGS technologies. The kits are validated for somatic analysis (SNPs, indels) of DNA extracted from cancer tissues (fresh, frozen or FFPE) or other body tissues. The kits contain all reagents required for the preparation of a specific bidirectional library of amplicons designed for the NGS analysis using Illumina or Ion Torrent sequencers.

Possible custom panels upon request!



LUNG panel

Non-small cell lung cancer (NSCLC) treatment

REF: H1000-16 (16 tests)
REF: H1000-48 (48 tests)
-Analysis: somatic
-Number of pools: 2
-Panel size: 0.9 kb
-Input DNA: 20ng/reaction
Target: EGFR (exons 18,19,20,21), KRAS (exons 2,3,4)

COLON panel

Metastatic colorectal cancer (mCRC) treatment

REF: H1010-16 (16 tests)
REF: H1010-48 (48 tests)
-Analysis: somatic
-Number of pools: 2
-Panel size: 0.9 kb
-Input DNA: 20ng/reaction
Target: KRAS (exons 2,3,4), NRAS (exons 2,3,4), BRAF (exon 15)

BENKit panel

Multicancers treatment

REF: H1020-16 (16 test)
REF: H1020-48 (48 test)
-Analysis: somatic
-Number of pools: 2
-Panel size: 1.5 kb
-Input DNA: 20ng/reaction
Target: KRAS (exons 2,3,4), NRAS (exons 2,3,4), BRAF (exon 15)

THYRO-ID panel

Mutations profiling of Papillary Thyroid Carcinoma

REF: H1030-16 (16 tests)
REF: H1030-48 (48 tests)
-Analysis: somatic
-Number of pools: 6
-Panel size: 7 kb
-Input DNA: 20ng/reaction
Target: KRAS (exons 2,3,4), NRAS (exons 2,3,4), HRAS (exons 2,3), BRAF (exon 15), TP53 (exons 4,5,6,7,8,9), NOTCH1 (exons 26,27), PTEN (exons 5,6,7,8), CDKN2A (exons 1,2), EGFR (exons 18,19,20,21), AKT1 (exon 1), CTNNB1 (exon 1), PIK3CA (exons 10,21), TSHR (exons 6,8,9), hTERT (promoter)

ONCOLOGY screening

Screening of the coding region of target genes through a molecular protocol based on NGS technologies. The kits are validated for germline and/or somatic analysis (SNPs, indels, CNVs) of DNA extracted from cancer tissues (fresh, frozen or FFPE) or body tissues (blood or other). The kits contain all reagents required for the preparation of a specific bidirectional library of amplicons designed for the NGS analysis using Illumina or Ion Torrent sequencers.

- Possible custom panels upon request!

BRaCA screen

Hereditary and Somatic Variants profiling in Breast and Ovary cancer

REF: S2000-16 (16 tests)
REF: S2000-48 (48 tests)
-Analysis: germline/somatic
-Number of pools: 3
-Panel size: 26 kb
-Input DNA: 20ng/reaction
Coverage: full coding exons plus padding regions (>20bp)
Target: BRCA1, BRCA2, TP53

BRaVO screen (CE-IVD version upcoming)

Germline Variants profiling in Hereditary Breast and Ovarian Cancer Syndrome (HBOC)

REF: S2001-16 (16 tests)
REF: S2001-48 (48 tests)
-Analysis: germline
-Number of pools: 3
-Panel size: 62.5 kb
-Input DNA: 20ng/reaction
Coverage: full coding exons +padding regions (>20bp)
Target: ATM, BRCA1, BRCA2, CDH1, CHEK2, PALB2, PTEN, TP53

HECO screen (CE-IVD version upcoming)

Germline Variants profiling in Hereditary nonpolyposis colorectal cancer (HNPCC)

REF: S2002-16 (16 tests)
REF: S2002-48 (48 tests)
-Analysis: germline
-Number of pools: 3
-Panel size: 39 kb
-Input DNA: 20ng/reaction
Coverage: full coding exons + padding regions (>20bp)
Target: APC, EPCAM, MLH1, MSH2, MSH6, MUTYH, PMS2, STK11

HEVA screen

Hereditary Variants profiling in Breast and Ovary, Lynch Syndrome, and other cancer-related diseases

REF: S2010-16 (16 test)
REF: S2010-48 (48 test)
-Analysis: somatic
-Number of pools: 3
-Panel size: 145 kb
-Input DNA: 20ng/reaction
Coverage: full coding exons + padding regions (>20bp)
Target: ATM, APC, BARD1, BRCA1, BRCA2, BRIP1, CDH1, CHEK2, EPCAM, MLH1, MSH2, MSH6, MUTYH, NBN, PALB2, PMS2, PTEN, RAD50, RAD51C, RAD51D, STK11, TP53

GENETIC screening

Screening of the target genes (full-coding region or mutation hotspots) through a molecular protocol based on NGS technologies. The kits are validated for germline analysis (SNPs, indels, CNVs) of DNA extracted from body tissues (blood or other). The kits contain all reagents required for the preparation of a specific bidirectional library of amplicons designed for the NGS analysis using Illumina or Ion Torrent sequencers.

Possible custom panels upon request!

CFTR screen (CE-IVD version upcoming)

Variants profiling in Cystic fibrosis (CFTR full-coding region)

REF: S2030-16 (16 tests)
REF: S2030-48 (48 tests)
-Analysis: germline
-Number of pools: 2
-Panel size: 8.5 kb
-Input DNA: 20ng/reaction
Coverage: full coding exons +padding regions (>20bp)
Target: CFTR

NEPHI screen (CE-IVD version upcoming)

Neurofibromatosis type 1,2, Watson syndrome, Legius syndrome, Noonan syndrome type2, Schwannomatosis type1, 2

REF: S2050-16 (16 tests)
REF: S2050-48 (48 tests)
-Analysis: germline (N1), somatic (N2)
-Number of pools: 3 (N1, N2)
-Panel size: 19 kb (N1), 12.1 kb (N2)
-Input DNA: 20ng/reaction (N1, N2)
Coverage: full coding exons +padding regions (>20bp)
Target (N1): NF1, SPRED1
Target (N2): NF2, LZTR1, SMARCB1

GENETIC screening

Screening of the target genes (full-coding region or mutation hotspots) through a molecular protocol based on NGS technologies. The kits are validated for germline analysis (SNPs, indels, CNVs) of DNA extracted from body tissues (blood or other). The kits contain all reagents required for the preparation of a specific bidirectional library of amplicons designed for the NGS analysis using Illumina or Ion Torrent sequencers.

- Possible custom panels upon request!

IVF screen (CE-IVD version upcoming)

Hereditary Variants profiling in genetic-related diseases

REF: S2040-16 (16 tests)
REF: S2040-48 (48 tests)
-Analysis: germline
-Number of pools: 3
-Panel size: 60.5 kb
-Input DNA: 20ng/reaction
Coverage: hotspots/full coding exons +padding regions (>20bp)
Target diseases: Alzheimer and Parkinson disease, Ataxia-telangiectasia, Bloom syndrome, Breast-ovarian cancer (familial), Canavan disease, Choroideremia, Cystic fibrosis, Deafness (autosomal recessive), Duchenne and Becker muscular dysthrophy, Fabry disease, Factor XIII deficiency, Familial adenomatous polyposis, Familial mediterranean fever, Fanconi anemia, Favism, Galactosemia, Gaucher's disease, Glutaric acidemia (type 1), Hearing loss nonsxinfromic (DFNB1, DFNB9), Hemochromatosis, Hereditary fructose intolerance, Juvenile retinoschisis (X-linked), Krabbe disease, Male infertility, Mucopolysaccharidosis I (or Hurler syndrome), Niemann-Pick disease, Nijmegen breakage syndrome, Ovarian hyperstimulation syndrome, Phenylketonuria, Polycistic kidney disease types I and II, Pompe disease, Pregnancy loss, Protrombin deficiency, Riley-Day syndrome (Familial dysautonomia), Smith-Lemli-Opitz syndrome, Spherocytosis (hereditary), Tay-Sachs disease, Sickle cell anemia, Thrombocytopenia (congenital amegakaryocytic), Thrombophilia, Tyrosine hydroxilase deficiency, Von Hippel–Lindau disease, Wilson's disease, Zellweger syndrome spectrum (PEX1-related).

Data Analysis

4bases kits sequencing results are validated for the data analysis with the **CE-IVD Varsome Clinical** software. Therefore, we are proud to provide our portfolio even bundled with Varsome Clinical data analysis software!
In addition, 4bases is the distributor of **Varsome Clinical** data analysis software (stand-alone version) for the Italian market.

REF: AS02-16 (16 test)
REF: AS02-48 (48 test)

VarSome Clinical is a clinically validated tool for variant discovery, annotation, and interpretation of NGS data for whole genomes, exomes, and gene panels, for individual samples, trios, families, and cohorts.
VarSome Clinical allows fast and accurate processes of variant discovery, annotation, and interpretation of NGS data.
VarSome Clinical supports molecular geneticists and clinicians in the achievement of diagnoses and tailoring treatment strategies for genetic conditions.
https://saphetor.com/varsome-editions/varsome-clinical/

Ask for information!

www.4bases.ch

4bases

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