basepair

Basepair Point & Click Web Portal for **NGS Analysis, Reporting** and **Test Analytics**

PGT-A

PGT-M

NIPT

niPGT-A

A Learn how Basepair, a next generation bioinformatics company, is helping test manufacturers go-to-market with an end-to-end, sample to report solution for reproductive health applications.

4-8X
Faster to market

5X
Reduction in TCO

2X
Increase in Re Order Rates

AN END-TO-END PLATFORM FOR TEST MANUFACTURERS

In today's rapidly advancing Reproductive Health Industry, Next Generation Sequencing (NGS) based tests are rapidly becoming industry standard. Manufacturers of such tests face the challenge of providing their customers with efficient, accurate, user-friendly analysis and reporting solutions optimized for their products. Basepair's powerful Software-as-a-Service (SaaS) platform is transforming the way these manufacturers approach the delivery of companion software solutions to their global customer base.

EASY INTERFACE

SEQUENCER   BASEPAIR   CLINICAL REPORT
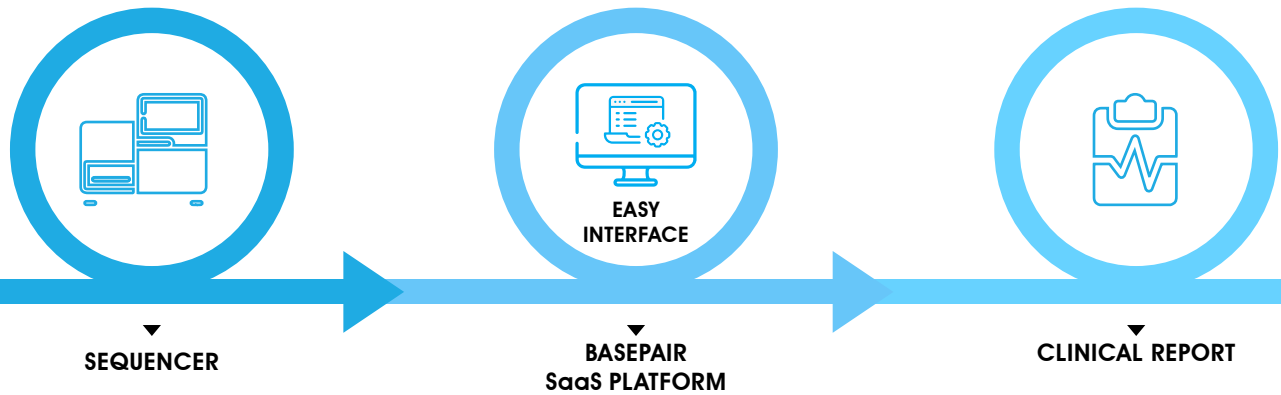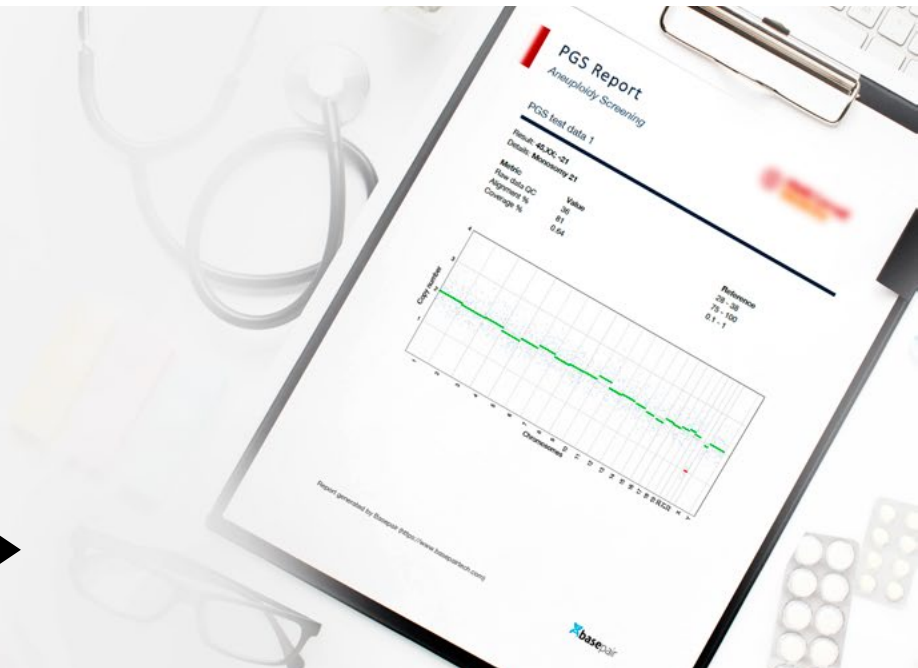   SaaS PLATFORM

Figure 1: One click activates an automated workflow to process large numbers of samples for rapid PGT-A, PGT-M, niPGT-A or NIPT NGS analysis and reporting

Launched by scientists from the Harvard Medical School, Basepair provides clinics with the first of its kind – an end-to-end platform that seamlessly unifies sequencers with automated NGS analysis and clinical reporting on small mutations and copy number changes. Test manufacturers leveraging Basepair get real time access to usage and quality test analytics, whilst Clinics using Basepair can achieve significant improvements to their productivity and speed to better serve their patients.

Figure 2: Generate reports for NGS based tests via a Basepair automated workflow in less than fifteen minutes with minimal hands-on timeFigure

WHITE LABELING
Our low lift approach means your company-branded web portal will be and running in weeks, allowing for seamless integration with existing branding and marketing strategies.

BUNDLING
A unique coupon-based business operations layer enable manufacturers to bundle their kits with unique codes. These coupons connect end-users to the correct analysis pipelines for the number of kits purchased, Helping to contain cloud costs.

BUSINESS INTELLIGENCE
The ability to connect analysis to kit purchases delivers valuable customers insights such as real time kit usage and quality metrics that are invaluable for support, marketing & sales teams

DATA RESIDENCY COMPLIANCE

The platform's ability to federate analysis so that it can be run in any cloud account, anywhere in the world, eliminates the need for data movement.
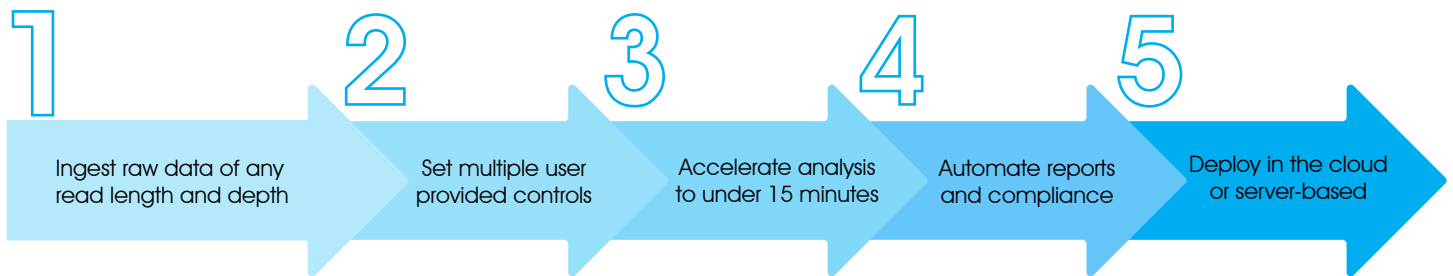
SECURITY

Basepair's platform adheres to the highest standards of data security and compliance. Sensitive customer data is encrypted at rest and transfer and compliance with GDPR and HIPAA regulations is assured and enhances security and data privacy.

HOW BASEPAIR WORKS FOR CLINICS

Dedicated cloud support for clinics helps to ensure Basepair runs without the constraints of local implementations that can often struggle to handle sudden influxes of samples. Basepair bioinformatics and NGS scientists are also available to help clinics interpret results and customize reports as needed.

1 Ingest raw data of any read length and depth

2 Set multiple user provided controls

3 Accelerate analysis to under 15 minutes

4 Automate reports and compliance

5 Deploy in the cloud or server-based

FLEXIBILITY AND INNOVATION

Set your own panel of controls to match your clinic's experimental protocol. Generate robust, consistent results that can be repeated going forward via standardization with Basepair. Our development is active and continually improving to help ensure that all Basepair users stay on the cutting-edge of NGS analysis and reporting.

WORKFLOW

Consistently apply best practices with Basepair's workflow, and ensure that your clinic continually uses the latest innovations to enhance speed and accuracy. Customize sets of normals to remove biases. Generate visual reports that to help your clinic become better positioned to increase diagnostic and prognostic yield.
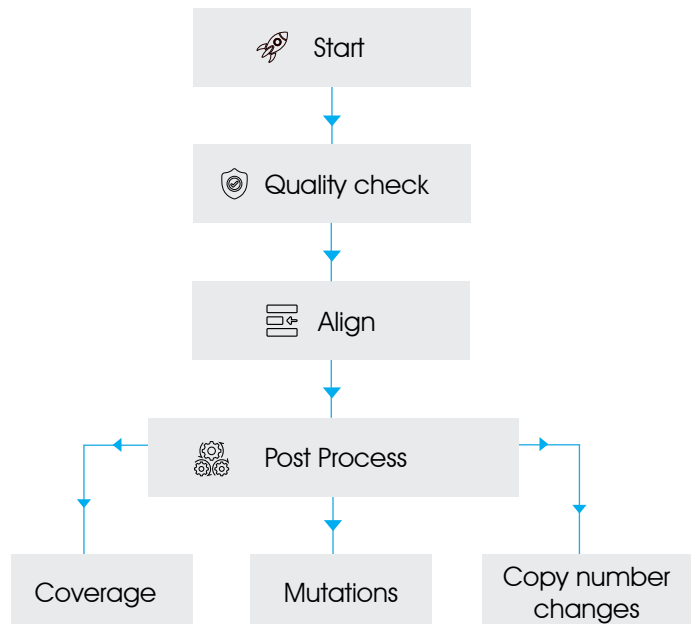
FLEXIBLE DATA IMPORT

Connect the platform directly to your cloud storage or alternatively import raw genomic and subject data to the Basepair platform via drag & drop, CLI, FTP or from Illumina's BaseSpace.

Start

Quality check

Align

Post Process

Coverage | Mutations | Copy number changes

POINT & CLICK GRAPHICAL USER INTERFACE (GUI)

Designed with non computational scientists in mind, Basepair's platform enables users to perform complex analyses and interpretation with ease, all with with minimal training.

CUSTOMIZABLE REPORTS

Typically, clinics and physicians prefer to treat their patients uniquely. After the analysis is complete, lab technicians can use a combination of industry standard and custom-built visualizations to interpret and sign off on the results of the test, quickly and easily generating customizable reports for their PGT-A, PGT-M, niPGT-A and NIPT NGS tests.

ONLINE COLLABORATION

Embryologists, physicians and technicians can easily view and collaborate on reports online via safe, compliant sharing from any computer or device. Fine-grained access controls ensure only users with the appropriate permissions can see sensitive patient data.

SPEED, SCALABILITY AND COST-EFFICIENCY

Our scalable architecture maximizes efficiency, enabling clinics to generate reports in 15 minutes or less. Massive parallel processing allows clinics to run thousands of tests simultaneously with no degradation in efficiency. Compute instance optimization also means most clinics can achieve a lower lost per sample with Basepair.

SECURITY, DATA PRIVACY & COMPLIANCE

We have meticulously architected the platform to meet or exceed HIPAA specifications. Although the platform itself is not CAP/CLIA or 21 CFR Part 11 certified, Basepair complies with GxP regulations enforced by the US Food and Drug Administration (FDA), which makes the compliance process easier for our customers and helps them create a certified solution. Additionally, we follow dbGaP Security Best Practices for handling genomic data, working proactively with clients to comply with sensitive data requirements and ensure organizations meet and exceed industry standards. Furthermore, connection to your own cloud account for compute and storage eliminates nearly all compliance issues and enhances security and data privacy.

ARTIFICIAL INTELLIGENCE (AI):

Basepair's AI helps clinics to improve accuracy and minimize hands-on time in the interpretation of results. For instance, Basepair AI will automatically detect and notify staff of low quality samples.

ROLL-OUT PLAN

Get started with a Baspair free consultation. The Basepair platform can be fully implemented in clinics with single or multiple locations in about four to eight weeks. Please contact us to schedule a free consultation.

Contact us

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