

Guide to the Embryo Health Score[®] Test



LifeView[™]
Powered by Genomic Prediction

WHAT IS THE EMBRYO HEALTH SCORE® TEST?

The **Embryo Health Score Test** (EHS) is designed to help IVF-patients and clinicians choose the genetically **healthiest embryo** for **transfer**. By combining the genetic risk of several common polygenic conditions, such as diabetes, cancers, schizophrenia or heart disease, it suggests a **priority order** reflective of the embryos' overall genetic health. This Embryo Health Score allows the patient and clinician to make a choice that **simultaneously reduces** the **risk** for multiple diseases, something we refer to as **Choice over Chance™**.

Patients using any LifeView PGT service have the option to include this more advanced test. With just **one biopsy**, LifeView Embryo Health Score Test can gather a wealth of information that other tests cannot.

Examples of polygenic disorders our tests can detect include*:

- Type 1 Diabetes
- Type 2 Diabetes
- Certain cancers such as breast cancer, testicular cancer, prostate cancer and malignant melanoma
- Cardiac risk factors such as coronary artery disease and atrial fibrillation
- Inflammatory Bowel Disease
- Asthma
- Schizophrenia

All of the disease risks for each embryo are combined into a **single number**: The Embryo Health Score (EHS). Embryos with **higher embryo health scores** are estimated to have **better health**, as in lower overall disease risks.

Anyone may **benefit** from using the LifeView Embryo Health Score (PGT-P), **especially** if aneuploidy screening (PGT-A) is already part of the patient's IVF plan, or if a patient has a personal or **family history** of any condition included in our panel.

Is PGT-A included with the Embryo Health Score Test?

Yes. The Embryo Health Score Test **includes aneuploidy screening**, known as PGT-A, at no additional cost. PGT-A is included without the need for any additional biopsies, samples or procedures.

What does the testing process involve?

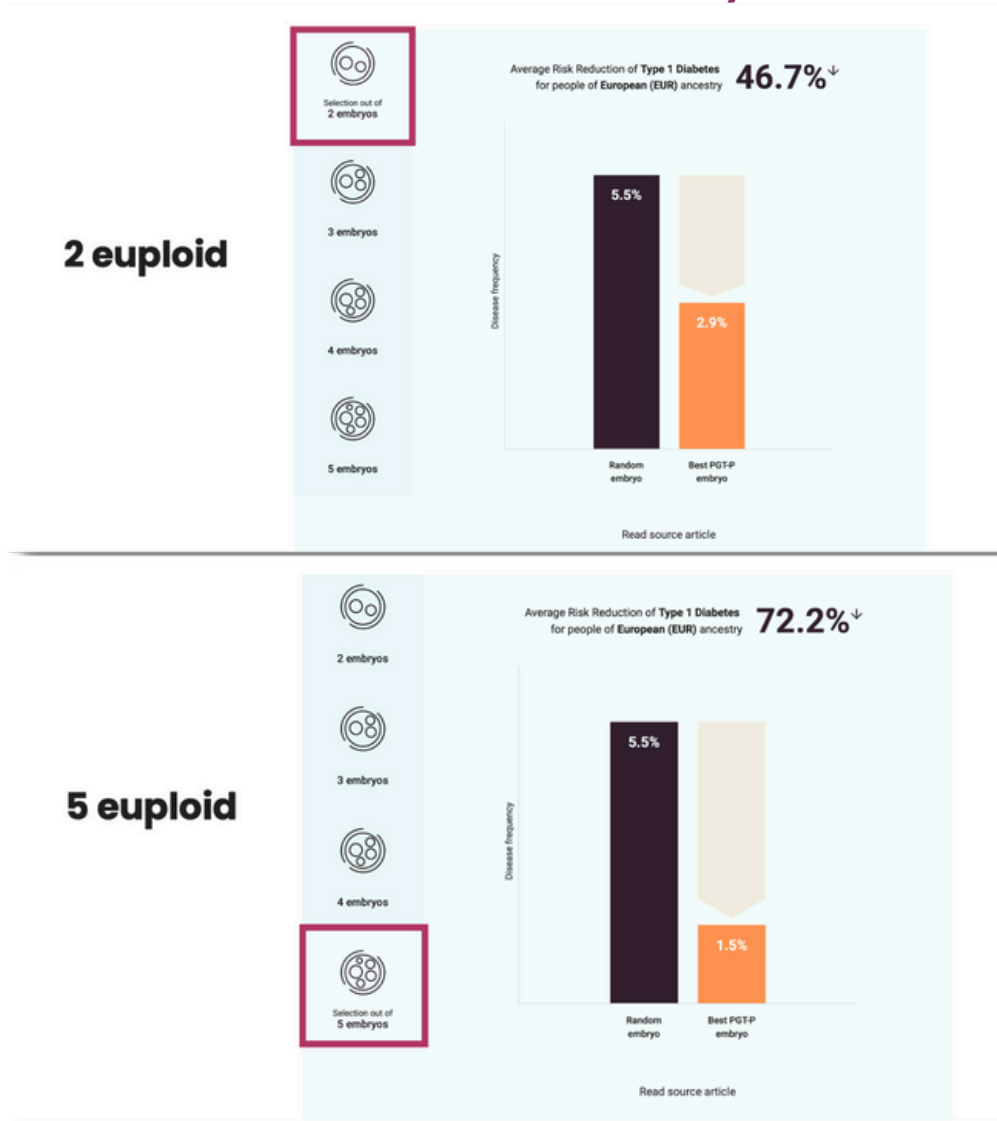
- Your clinic fills out a test requisition form
- Genetic counseling with the patient is included at no extra charge to review the process and detail the benefits and limitations of the Embryo Health Score
- Maternal and paternal saliva is collected
- A report is sent to you to review with your patient within 21 days of receiving samples
- Post-test genetic counseling is always available

**This list is subject to change based on the patient's ethnicity. Patients can also select a subset of diseases to test if desired.*

HOW CAN I USE THE EMBRYO HEALTH SCORE® TEST IN MY CLINIC?

The Embryo Health Score (EHS) is a screening test designed to help patients and their clinicians select which embryo to transfer based on health data. It is used in combination with PGT-A. Using EHS allows you and your patients to identify which embryo has the lowest risk of certain conditions compared to the other embryos in their cycle(s). This relative risk reduction has been validated for multiple polygenic conditions across different ethnic backgrounds. In addition, patients concerned about a specific disease risk based on their personal or family history, should refer to the calculated disease risks that are provided for each embryo for more detailed information.

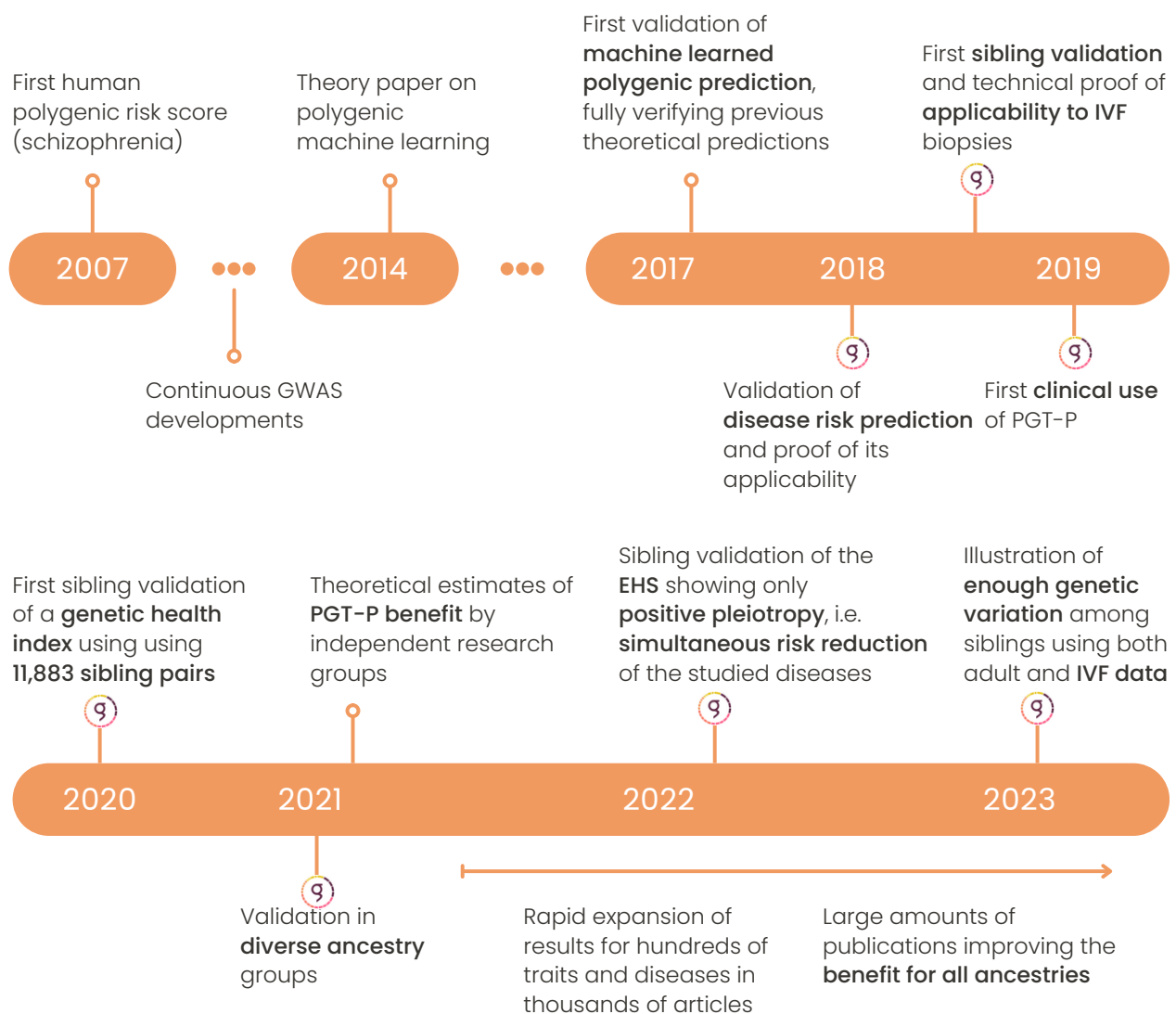
Relative Risk Reduction with the Embryo Health Score



Treff et al. *Frontiers Endocrinology* 2019

STUDIES AND VALIDATIONS


Polygenic risk scores – the technology behind the Embryo Health Score® Test (EHS) – have been around over 15 years, with the last half-decade bringing an explosion of advancements. Polygenic testing is now becoming widely adopted, based on a solid foundation of evidence. The benefit of PGT-P and the EHS is part of these scientific breakthroughs. By using more than 40,000 siblings with full health records, **PGT-P** and the **EHS** have been validated in multiple peer-reviewed publications, **proving** that it **lowers disease risks simultaneously** (also among full siblings), can be calculated from a single **standard embryo biopsy**, and provides **benefit for all ancestries**. If not directly involved, it is hard to keep up with the fast pace of the technology. Here is a little roadmap with the biggest scientific milestones...



Read more about the EHS and the scientific validation of PGT-P on our [webpage](#), where you also can find a full list of references.



WHAT IS IN THE REPORT?



Report for:
Prospective Parent A & Prospective Parent B

Patient
Prospective Parent A
Date of Birth: 01/01/1990
Phone: +1 (929) 123 4567
Email: parent.a@email.com
Address: 1 Family St.
New York, New York, 10001

Partner
Prospective Parent B
Date of Birth: 01/02/1990
Phone: +1 (929) 123 4568
Email: parent.b@email.com

Samples received: 01/01/2023
Report signed: 01/07/2023
Analysis version v23.1: 09/21/2022
Clinical report: v2.4.0 12/05/2022

Case ID: 00001
Sample Type: Trophoctoderm
Test Type: A, P
24 Chromosome Microarray

Referring Clinician
Dr. Med Clinician
1 Road Street
New York, New York, 10001
dr.mclintian@email.com
+1 (929) 123 4567

Processing Laboratory
Genomic Prediction Clinic Laboratory, Inc.
service@genomicprediction.com
+1 (973) 529 4223
671 B US Highway One,
North Brunswick,
United States, NJ 08902

PGT-P panel: **Caucasian** Patient (or egg donor) self-reported ancestry: Caucasian(Non-Hispanic)
Partner (or sperm donor) self-reported ancestry: Caucasian(Non-Hispanic)

Euploid embryos

| # | PGT-A | Sex | Embryo Health Score |
|----|-------|--------|---------------------|
| 7 | 46,XX | female | 0.77 |
| 9 | 46,XX | female | 0.73 |
| 3 | 46,XY | male | 0.7 |
| 10 | 46,XY | male | 0.69 |
| 4 | 46,XX | female | 0.33 |
| 1 | 46,XY | male | 0.09 |
| 8 | 46,XX | female | 0.08 |
| 11 | 46,XX | female | -0.11 |
| 6 | 46,XX | female | -0.22 |
| 5 | 46,XY | male | -1.19 |

Aneuploid embryos

| # | PGT-A | Sex | Embryo Health Score |
|----|-----------|------|---------------------|
| 2 | 45,XY,-10 | male | - |
| 12 | 47,XY,+22 | male | - |

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Embryos with **higher scores** are estimated to have **better health**, as in lower overall disease risks

PGT-A results are **included**

The health score is given for **euploid embryos only**

A LOOK AT EACH EMBRYO

Embryo #1
Euploid
Male



| | Risk | Avg Risk | Ratio | Risk Percentile |
|----------------------------|--------|----------|-------|-----------------|
| Type 1 Diabetes | 0.56% | 0.70% | 0.79x | 40 |
| Type 2 Diabetes | 25.47% | 30.57% | 0.83x | 30 |
| Testicular Cancer | 0.56% | 0.52% | 1.07x | 79 |
| Prostate Cancer | 15.90% | 14.27% | 1.11x | 67 |
| Basal Cell Carcinoma | 24.43% | 26.00% | 0.94x | 36 |
| Malignant Melanoma | 2.86% | 2.60% | 1.1x | 69 |
| Heart Attack | 9.62% | 14.90% | 0.65x | 5 |
| Atrial Fibrillation | 19.15% | 29.70% | 0.64x | 12 |
| Coronary Artery Disease | 31.12% | 43.30% | 0.72x | 11 |
| Inflammatory Bowel Disease | 1.05% | 1.44% | 0.73x | 36 |
| Asthma | 15.82% | 5.00% | 3.16x | 99 |
| Schizophrenia | 2.26% | 1.31% | 1.72x | 87 |

Overall risk percentile compared to the general population

Case ID: 00001, Patient: Prospective Parent A & Prospective Parent B

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Risk percentage for this particular embryo for this particular disease

Lifetime risk percentage for the general population

The ratio between the embryo risk and general population risk

HOW TO SPEAK TO YOUR PATIENTS ABOUT THE EMBRYO HEALTH SCORE® TEST

All patients may benefit from the Embryo Health Score Test (EHS) and it is particularly relevant for those with family disease history. Jamie and Brennan Cassidy are a testament to this.

“I have diabetes and I would do anything to not pass that along”

– Brennan Cassidy

Simply **being told** by their clinician that this test was available is something the grateful couple views as a **game-changer**.



Scan to hear from the Cassidys

This is also true in general. In a recent survey by Science, **46% of patients** under age 35 indicated that they would **want to use this technology**.

When speaking with patients already doing PGT-A:

- Inform them about the Embryo Health Score Test. 50% of all IVF cycles already use some form of PGT.
- Note any relevant family history – the test may be especially beneficial for this group.
- Discuss that this is a risk reducing test and that only euploid embryos are tested. Embryos are prioritized, not excluded.

Is it ethical?

- What does the community say? **83%** of Americans do not think it is unethical.
- The EHS is **scientifically validated** with real and measurable benefit.
- The Embryo Health Score Tests screens for **disease risk only**.
- We believe this test should be **clearly explained**. We provide pre- and post-test genetic counseling services.

Discover the power of knowledge with LifeView by clicking on any underlined headline above to be taken to that URL.



JOIN OUR COMMUNITY

Embarking on your journey with us is a seamless process designed to ensure your success every step of the way.

Here's how to get started:

- **Connect with our Commercial Team:** Begin by reaching out to our dedicated Commercial Team, who will guide you through the initial steps and assist you in understanding our offerings tailored to your needs.
- **Perform a Test Run:** Take advantage of our test run, allowing you to experience our products or services firsthand. It's a risk-free way to ensure that our solutions align with your requirements before sending clinical cases.
- **Experience White-Glove Onboarding:** Once you're ready to proceed, our white-glove onboarding team dedicated to your account will provide you with personalized support, ensuring a smooth and efficient transition into our ecosystem. We'll work closely with your team to ensure a hassle-free experience.
- **Get Ongoing Support for Your Success:** Our commitment to your success doesn't end after onboarding. You'll have access to ongoing support, a network of resources, and regular check-ins to address any questions or concerns, ensuring that you achieve your goals with us.

This comprehensive approach ensures that you receive the support and guidance you need to establish a successful partnership with us.

Get started today by contacting service@genomicprediction.com



UNLOCKING THE POWER OF INFORMED CHOICES WITH LIFEVIEW

At LifeView, we are on a mission to empower patients with the knowledge they need to make informed healthcare decisions. We firmly believe that access to information is at the heart of better healthcare outcomes. Our commitment to this core mission is unwavering, and we invite you and your patients to join us on this transformative journey.

Why Access to Information Matters:

- **Empowerment Through Knowledge:** Informed patients make healthier choices. We believe that when individuals have access to accurate, up-to-date healthcare information, they can actively participate in their care, leading to better outcomes and a higher quality of life.
- **Enhanced Decision-Making:** With the right information, patients can confidently navigate the complex healthcare landscape, understanding their options and making decisions aligned with their values and preferences.
- **Community Building:** Our goal is to foster a sense of community among patients, caregivers, and healthcare professionals. By sharing information and experiences, we seek to create a supportive network where everyone can learn and grow together.

How Your Patients Can Educate Themselves:

Join Our Patient Webinars: LifeView hosts regular webinars featuring leading healthcare experts, where you can gain insights into various medical topics, ask questions, and learn from the best. Patients can register from the links in their LifeView patient Welcome Guide email.

Follow Us on Social Media: Stay updated with the latest healthcare trends, news, and tips by following us on our social media platforms. Engage in discussions and connect with a like-minded community.

Explore our Video Library: Explore our collection of informative videos, including interviews with healthcare thought leaders and coverage of cutting-edge medical advancements. Stay ahead of the curve with our video library.

Check Out Our Website: Visit our website for a wealth of resources, articles, and tools designed to empower you with knowledge. Find answers to your questions and access reliable information, all in one place.

Discover the power of knowledge with LifeView by clicking on any underlined headline above to be taken to that URL.



INTRODUCING OUR EXCEPTIONAL TEAM

Our passion is driven by our commitment to serving you. We are genuinely excited to provide you with top-notch solutions and assistance that exceed your expectations. It's our privilege to be at your service, and we can't wait to embark on this journey together, ensuring your satisfaction every step of the way.

Commercial



MARSHA LAURANO

Chief Commercial Officer



TODD HITCHCOCK

Director, Key Accounts

Client Success



LUCY LARANJEIRO

*Senior Director,
Head of Business Operations*



JENN KRAKOWSKI

Lead Client Relationship Specialist

Scientific Support



DR. CHARLENE ALOUF, PHD

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Head of Clinical Genetics*



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Licensed Certified Genetic Counselor

Medical Affairs & Marketing



ELIZABETH CARR

*Head of Marketing, Public Relations and
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TALIA METZGAR, RN

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Head of Medical Affairs*

Executive Leadership



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*Co-founder, Chief Science Officer, and Clinical
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