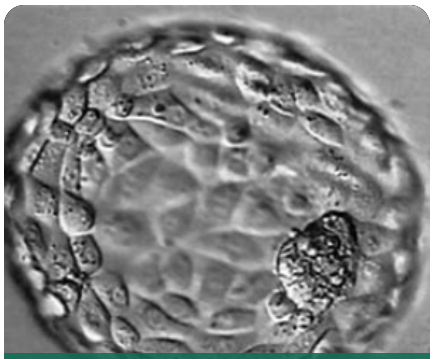
| PATIENT | DOB | PARTNER | RETRIEVAL | PHYSICIAN |
|---|---|---|---|---|
| Jane Doe | 04/12/1988 | John Doe | March 1, 2026 | Dr. Doe |

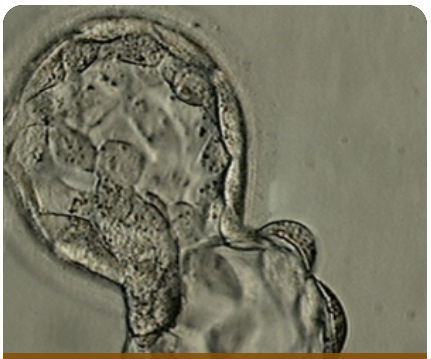
## Ranked Embryo Summary

Embryos ranked by AI morphokinetic score. Click any image to upload the corresponding last-frame photograph. Detailed parameter data follows on subsequent pages.

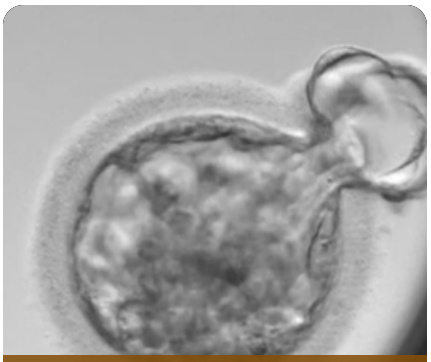
Embryo 1 **91**/100



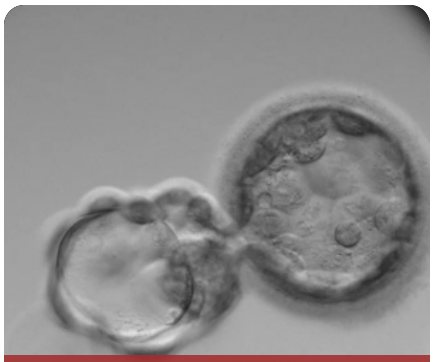
Embryo 2 **87**/100



Embryo 3 **74**/100



Embryo 4 **63**/100



Embryo 5 **31**/100

**Score key:** 75–100 · High quality  50–74 · Moderate  <50 · Reduced quality | Score = % of 8 morphokinetic parameters within published reference ranges (Gardner & Meseguer benchmarks)

| PATIENT | DOB | PARTNER | RETRIEVAL | PHYSICIAN |
|---|---|---|---|---|
| Jane Doe | 04/12/1988 | John Doe | March 1, 2026 | Dr. Doe |

## PARAMETER REFERENCE GUIDE

| PARAMETER | FULL NAME | DEFINITION | REFERENCE RANGE |
|---|---|---|---|
| **t2** | Time to 2-cell | Time from fertilization to first cleavage, producing a 2-cell embryo. Earlier, well-timed cleavage correlates with higher developmental competence. | **24 – 27 h** |
| **t5** | Time to 5-cell | Time from fertilization to the 5-cell stage. Delays may indicate reduced mitotic efficiency or cytoplasmic dysfunction. | **48 – 56 h** |
| **tBlast** | Time to Blastocyst | Time from fertilization to full blastocyst formation (cavitation complete). Timely blastulation correlates with chromosomal normalcy and implantation potential. | **96 – 110 h** |
| **Cleavage** | Cleavage Pattern | Cell division pattern during early development. Normal = sequential 2→4 division. Direct cleavage (2→4, skipping 3-cell) and reverse cleavage are abnormal patterns associated with aneuploidy. | **Normal** |
| **Symmetry** | 2-Cell Symmetry | Relative size equality of the two blastomeres at the 2-cell stage. Symmetric division is associated with better developmental outcomes; asymmetry may reflect unequal cytoplasmic distribution. | **Symmetric** |
| **Frag %** | Fragmentation | Percentage of embryo volume comprised of anucleate cytoplasmic fragments. <10% is associated with normal development; >25% significantly impairs blastulation and implantation rates. | **< 10%** |
| **ICM** | Inner Cell Mass | Gardner grade of the inner cell mass — cells that form the fetus. Grade A = prominent, tightly packed; B = several loosely grouped cells; C = very few cells. Primary predictor of implantation success. | **Grade A or B** |
| **TE** | Trophectoderm | Gardner grade of the outer cell layer that forms the placenta. Grade A = many cells, cohesive epithelium; B = few cells, loose epithelium; C = very few large or irregular cells. Directly impacts implantation and placentation. | **Grade A or B** |

Reference ranges based on Gardner & Meseguer morphokinetic benchmarks. Score = proportion of 8 parameters within published reference ranges. This is not a predictive viability score.

## INDIVIDUAL EMBRYO SCORECARDS

## Embryo 1 — 91/100

| PARAMETER | REFERENCE | OBSERVED | STATUS |
|---|---|---|---|
| t2 | 24–27 h | **26.1 h** | ✓ |
| t5 | 48–56 h | **51.3 h** | ✓ |
| tBlast | 96–110 h | **96.2 h** | ✓ |
| Cleavage | Normal | **Normal** | ✓ |
| Symmetry | Symmetric | **Symmetric** | ✓ |
| Frag % | < 10% | **3%** | ✓ |
| ICM | A or B | **A** | ✓ |
| TE | A or B | **A** | ✓ |

### AI OBSERVATIONS

- All 8 parameters within published reference ranges.
- Optimal cleavage timing throughout all developmental stages.
- ICM grade A / TE grade A — high-quality blastocyst morphology.
- Symmetric 2-cell division; normal cleavage pattern; minimal fragmentation (3%).

## Embryo 2 — 87/100

| PARAMETER | REFERENCE | OBSERVED | STATUS |
|---|---|---|---|
| t2 | 24–27 h | **25.8 h** | ✓ |
| t5 | 48–56 h | **52.0 h** | ✓ |
| tBlast | 96–110 h | **98.4 h** | ✓ |
| Cleavage | Normal | **Normal** | ✓ |
| Symmetry | Symmetric | **Symmetric** | ✓ |
| Frag % | < 10% | **5%** | ✓ |
| ICM | A or B | **A** | ✓ |
| TE | A or B | **B** | ~ |

### AI OBSERVATIONS

- 7 of 8 parameters within reference ranges; 1 borderline.
- Cleavage timing normal — t2 25.8 h, t5 52.0 h, tB 98.4 h.
- ICM grade A; TE grade B borderline (ref: A or B).
- Fragmentation 5%; symmetric division; normal cleavage pattern.

## Embryo 3 — 74/100

| PARAMETER | REFERENCE | OBSERVED | STATUS |
|---|---|---|---|
| t2 | 24–27 h | **27.4 h** | ~ |
| t5 | 48–56 h | **54.2 h** | ✓ |
| tBlast | 96–110 h | **101.1 h** | ✓ |
| Cleavage | Normal | **Normal** | ✓ |
| Symmetry | Symmetric | **Slight asymmetry** | ~ |
| Frag % | < 10% | **8%** | ✓ |
| ICM | A or B | **B** | ~ |
| TE | A or B | **B** | ~ |

### AI OBSERVATIONS

- 4 of 8 parameters within range; 4 borderline.
- t2 marginally delayed at 27.4 h (ref: 24–27 h).
- Slight 2-cell asymmetry noted; cleavage pattern otherwise normal.
- ICM grade B / TE grade B — acceptable range; fragmentation 8%.

## Embryo 4 — 63/100

| PARAMETER | REFERENCE | OBSERVED | STATUS |
|---|---|---|---|
| t2 | 24–27 h | **28.3 h** | ✗ |
| t5 | 48–56 h | **57.8 h** | ✗ |
| tBlast | 96–110 h | **104.8 h** | ✓ |
| Cleavage | Normal | **Direct clvg** | ✗ |
| Symmetry | Symmetric | **Asymmetric** | ✗ |
| Frag % | < 10% | **14%** | ✗ |
| ICM | A or B | **B** | ~ |
| TE | A or B | **C** | ✗ |

### AI OBSERVATIONS

- 1 of 8 within range; 1 borderline; 6 outside reference ranges.
- t2 and t5 delayed; direct cleavage (t2→t4) — abnormal pattern.
- Asymmetric 2-cell division; fragmentation elevated at 14%.
- TE grade C outside acceptable range; ICM grade B borderline.

## Embryo 5 — 31/100

| PARAMETER | REFERENCE | OBSERVED | STATUS |
|---|---|---|---|
| t2 | 24–27 h | **31.2 h** | ✗ |
| t5 | 48–56 h | **63.1 h** | ✗ |
| tBlast | 96–110 h | **118.3 h** | ✗ |
| Cleavage | Normal | **Reverse clvg** | ✗ |
| Symmetry | Symmetric | **Asymmetric** | ✗ |
| Frag % | < 10% | **22%** | ✗ |
| ICM | A or B | **C** | ✗ |
| TE | A or B | **C** | ✗ |

### AI OBSERVATIONS

- All 8 parameters outside published reference ranges.
- Significant delays across all stages — tB at 118.3 h.
- Reverse cleavage observed — high-risk pattern.
- Fragmentation 22%; ICM grade C / TE grade C.

| PATIENT | DOB | RETRIEVAL | PHYSICIAN |
|---|---|---|---|
| Jane Doe | 04/12/1988 | March 1, 2026 | Dr. Doe |

### PURPOSE

This report documents AI-observed morphokinetic parameters from automated time-lapse embryo video analysis. It is a clinical documentation tool for the ordering embryologist and physician only.

### NOT A RECOMMENDATION

This report does not constitute a transfer recommendation, clinical diagnosis, or prognosis. All embryo selection and disposition decisions are made solely by the ordering physician and clinical team in consultation with the patient.

### SCORE DEFINITION

The Morphokinetic Score reflects the proportion of observed parameters falling within published reference ranges (Gardner & Meseguer benchmarks). It is not a predictive viability score and should not be interpreted as such.

### COMPANY DISCLOSURE

This report was generated by MorphIQ — a specialized AI embryology platform. MorphIQ does not perform laboratory procedures, handle biological specimens, or provide medical advice. This report does not establish a physician-patient relationship.