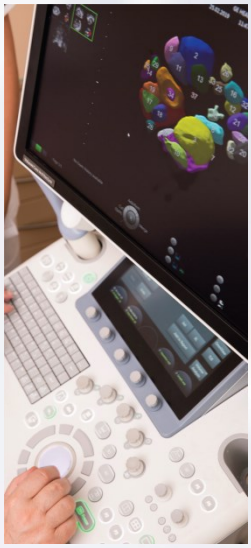
3DfollicleAI
Revolutionizing IVF with 3D Ultrasound and AI Technology

In partnership with Ubitech, **Eugonia** presents a groundbreaking research program - **3DfollicleAI**. Utilizing cutting-edge **three-dimensional (3D) ultrasound imaging** and **Artificial Intelligence (AI)**, our project aims to transform the landscape of Assisted Reproduction.

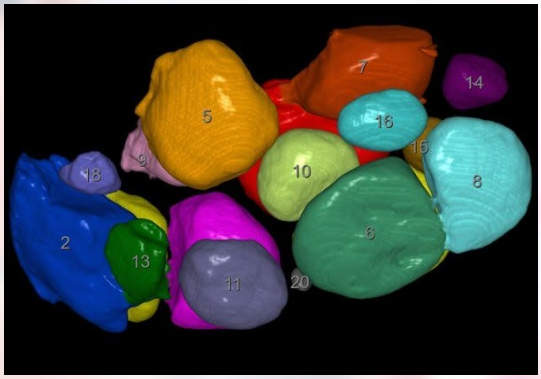
Left Ovary
Total#: 15

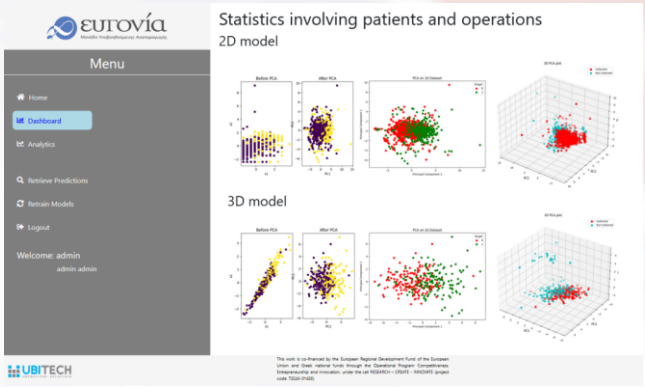
Nr.	d(V) mm	dx mm	dy mm	dz mm	mean d mm	V cm³
1	22.5	42.6	24.4	18.0	28.3	5.96
2	21.9	27.4	23.1	18.4	23.0	5.50
3	17.3	23.3	21.8	11.4	18.8	2.72
4	14.5	21.5	16.4	10.6	16.1	1.58
5	14.4	18.6	14.2	12.4	15.1	1.58
6	14.4	18.4	16.8	10.5	15.2	1.56
7	14.0	19.0	16.7	11.6	15.8	1.44
8	10.9	16.2	11.9	7.8	12.0	0.69
9	10.5	15.5	11.9	7.5	11.6	0.61
10	9.7	15.9	9.5	6.7	10.7	0.47
11	8.6	11.6	9.0	6.9	9.1	0.33
12	7.3	10.5	7.6	5.8	7.9	0.20



Why is this research important?

Accurate follicle measurement is crucial in IVF. Traditional 2D ultrasound methods are being revolutionized by our **automated 3DfollicleAI** system, enhancing the safety and success rates of IVF treatments.





What is 3DfollicleAI?

It is the first **AI powered 3D ultrasound app.** By analyzing 3D ultrasound data, 3DfollicleAI provides clinicians with precise estimations of stimulation cycle progress, enhancing the safety and success of IVF programs.

Our Impact:

- **Scientific Excellence:** Published in International Scientific Journals.
- **Global Recognition:** Presented at International Conferences.
- **Patient-Centered Innovation:** Enhancing IVF Safety and Success Rates.

Our Scientific Publications

Mature Oocyte Observational Study in high-risk patients:
•**Objective**: Automated 3D vs traditional 2D ultrasound.
•**Result**: Enhanced prediction of mature eggs retrieved.
•**Safety Focus**: Accurate monitoring for ovarian stimulation.

Comparison Study: 2D vs 3D Ultrasound:
•**Objective**: Discern discrepancies in follicle measurements between 2D and 3D.
•**Results**: 2D results in underestimation of ovarian follicle size.
•**Patient-Centric**: Tailored 3D approaches benefit women with multiple follicles.

Predictive Volumetric Assessments:
•**Objective**: To predict the number of oocytes retrieved, using volumetric assessment.
•**Results**: Volumetric assessment of follicles predicts oocyte number more accurately than traditional 2D assessment.
•**Patient Benefits**: Optimizing treatments based on follicular volume.

Blastocyst Prediction Study:
•**Objective**: Correlating follicular volume with blastocyst formation.
•**Results**: 3D Ultrasound can be used for good-quality blastocyst prediction.
•**Upgrading IVF**: Advancing predictive technologies for fertility treatments.

Research Highlights:

Innovative Approach: Integrating 3D ultrasound with AI.

Dataset: 524 cases over 3 years.

Predictive Power: Automated 3D measurements for follicle development.

Safety Assurance: Enhanced monitoring for high-risk patients.

Clinical Significance: Reliable predictions for oocytes retrieved and blastocyst formation.

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Με τη συγχρηματοδότηση της Ελλάδας και της Ευρωπαϊκής Ένωσης