

**CASE STUDY** 

# Using PBDC to Forecast Demand for Injectable Gonadotropins

# **Business Objective**

To support the launch of two new injectable gonadotropins, our client, a global leader in reproductive medicine, requested a demand forecast simulator.

Our research aimed to accomplish the following objectives:

- Identify current prescribing patterns for injectable gonadotropins, taking into account each of three primary procedures: egg freezing/ donation, IUI and IVF.
- Assess the impact on prescribing habits once client's two new products were released, including from which sources they would gain market share (i.e., source of share).
- Identify the patient groups who would be the most and least likely to be prescribed these new products as well as what percentage of the market they represent.

## The ThinkGen Solution

#### Step 1: Determining the appropriate approach

Knowing we would be working with a limited sample, due to the highly specialized nature of the audience, we proposed patient-based discrete choice, which could leverage fractional factorial design and analysis to increase our number of observations and create a more stable long-term forecast than traditional prescribing allocations.

#### **Step 2: Evaluating patient profiles**

By using PBDC, ThinkGen was able to optimize the value of N=88 respondents. Respondents evaluated five unique patient profiles during a 25-minute online survey, which generated data for N=440 hypothetical patients and N=1,320 use cases. ThinkGen collaborated closely with our client to ensure the patient attributes included in the PBDC exercise were representative of real-world prescribing situations.





# Methodology

Patient-Based Discrete Choice (PBDC)



#### **Stakeholders Recruited**

Reproductive Endocrinologists and Infertility Specialists



# Countries

**United States** 



# **Therapeutic Area**

Reproductive Medicine



## **Results**

Using secondary market data provided by our client to calibrate raw data, ThinkGen developed an Excel-based forecast simulator featuring multiple user-defined inputs, such as:

- New product launch dates
- New product dosing options
- Monthly rates of uptake / adoption
- Average selling price (ASP) of new products



Although many insurances are now covering some – or all – assisted reproductive procedures, there are too many that still don't. Therefore, cost remains extremely important factor to consider.

- Physician Verbatim

# **Summary**

The results ThinkGen delivered allowed our client to forecast demand for their two new products. Even with the low number of qualified participants, the collection of N=440 patient-level data points gathered by PBDC allowed for predictions within a 1-4% confidence interval for both products.

Overall, our results helped our client to make more informed decisions as they began to prepare marketing budgets and production schedules for the upcoming launches.