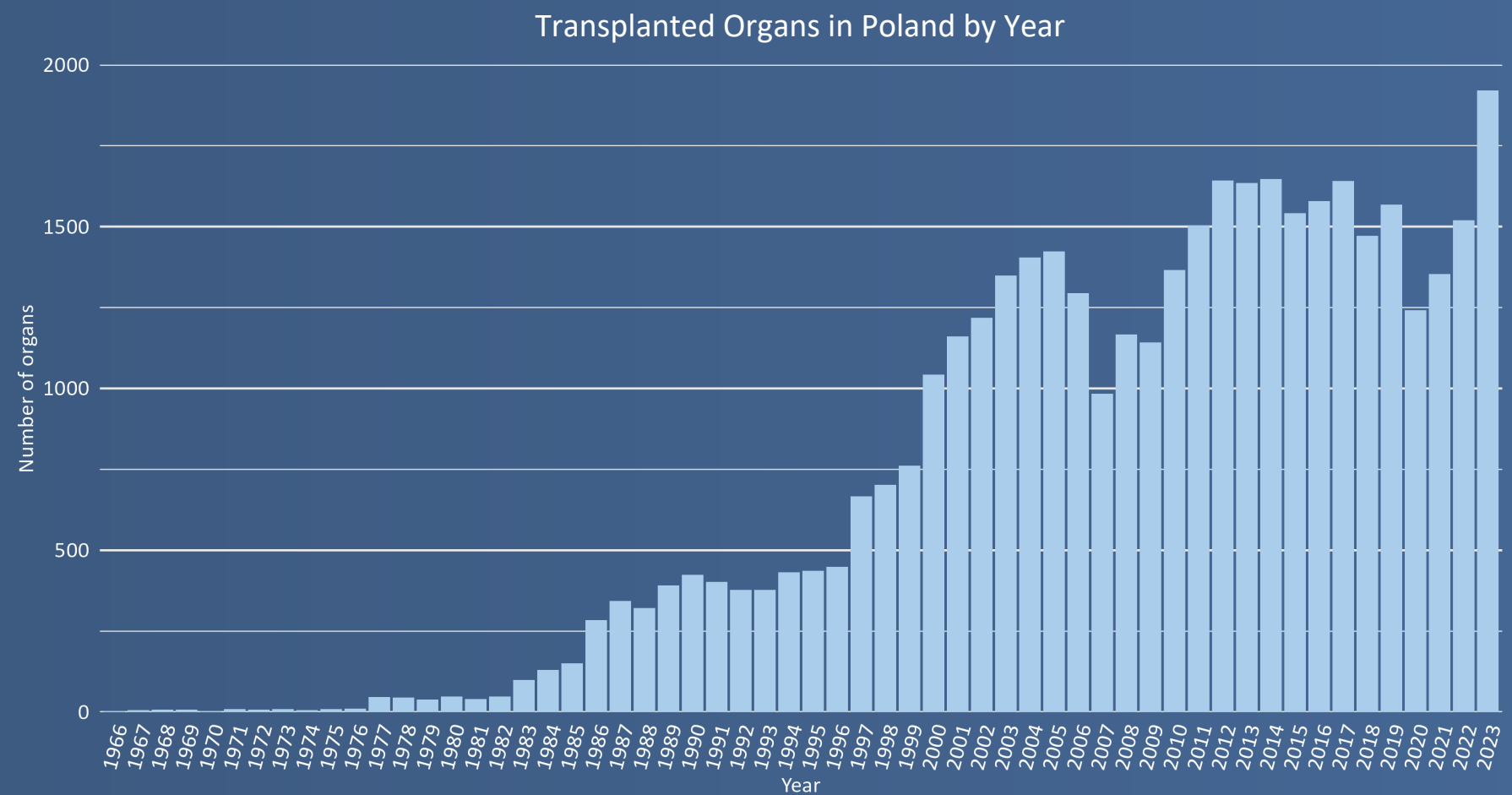


# SHARE A PART, SAVE A HEART

Organ transplants are widely recognized as lifesaving procedures and, for many, the only path to survival. In 2022 the Global Observatory on Donation and Transplantation reported that 157,494 transplants were performed worldwide — an astounding rate of 18 transplants every hour. Yet, despite these significant numbers, this meets only about 10 percent of the global demand, leaving countless patients on waiting lists around the globe, hoping for a chance at life.

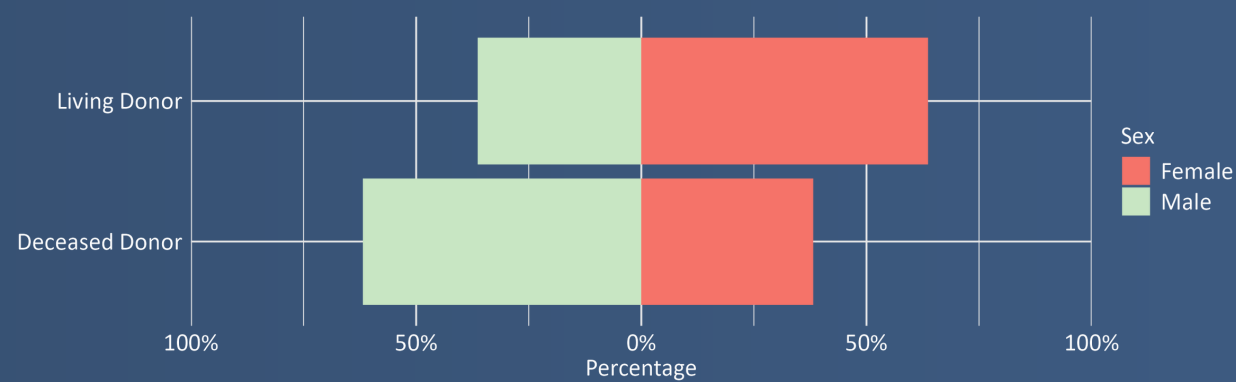
## DEVELOPMENT OF TRANSPLANTOLOGY IN POLAND

The first transplanted organ in Poland was a kidney. The surgery was performed on 26th January 1966 in Warsaw. Since that milestone, Polish transplantology has developed dynamically, as illustrated in the adjacent plot. However, a notable drop in the number of transplanted organs occurred in 2007. Some people believe that this crisis was caused by a corruption scandal, but the primary cause was likely the 2005 amendments to the Implied Consent Act. Consequently, the decrease became evident in 2006. Another decline can be seen in 2020, most likely due to the impact of the COVID-19 pandemic. Since then, Polish transplantology has recovered, reaching a record-breaking number of 1,920 transplanted organs in 2023.



## MEN VS WOMEN

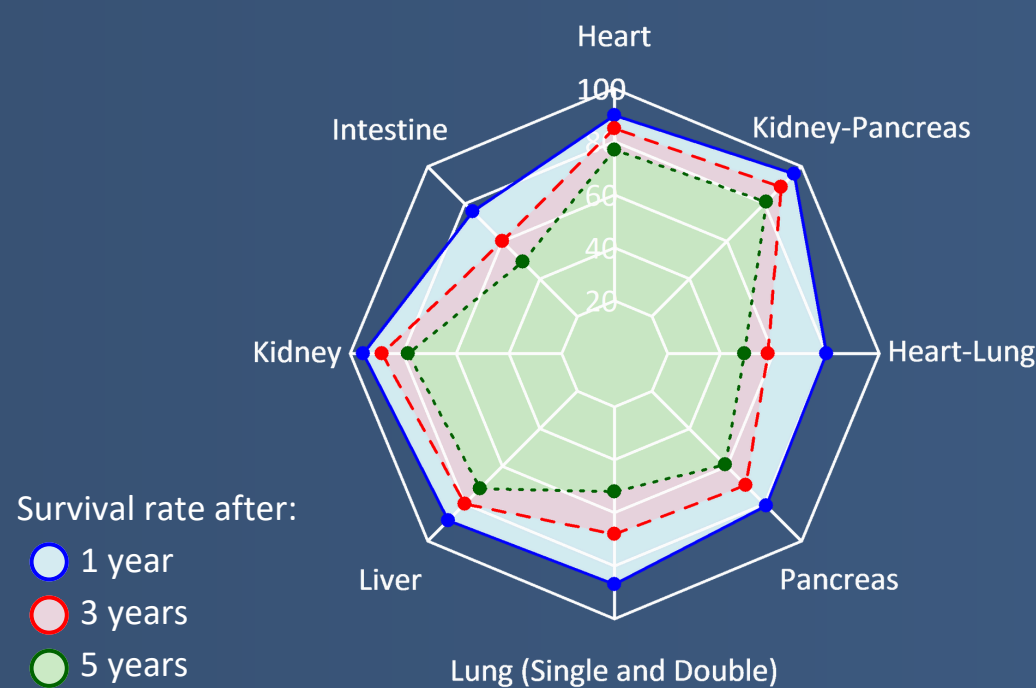
Comparison of Male and Female Organ Donors by Donor Status



This plot presents an interesting relationship between the sex and donor status. More than 60% of living donors are women. In contrast, the situation is reversed among deceased donors, where male donors make up the majority.

## LIFE AFTER TRANSPLANT

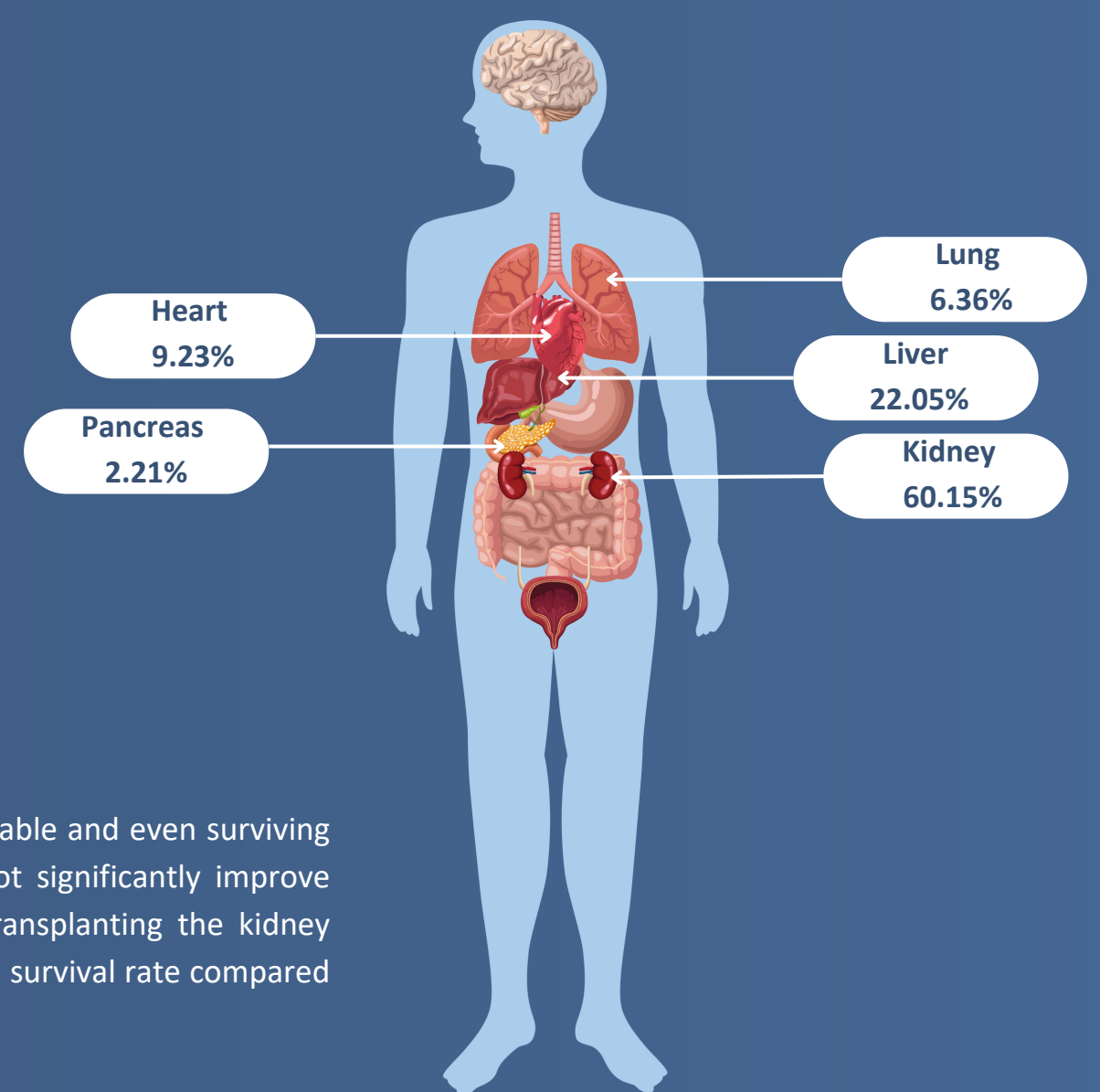
Survival Rates by Organ Transplantation



This radar chart illustrates the differences in survivability following organ transplants. As shown, the organs most likely to be accepted are kidney, heart and liver, while intestine is the most likely to be rejected. The most significant difference between survival rates is seen after the first and third year post-surgery.

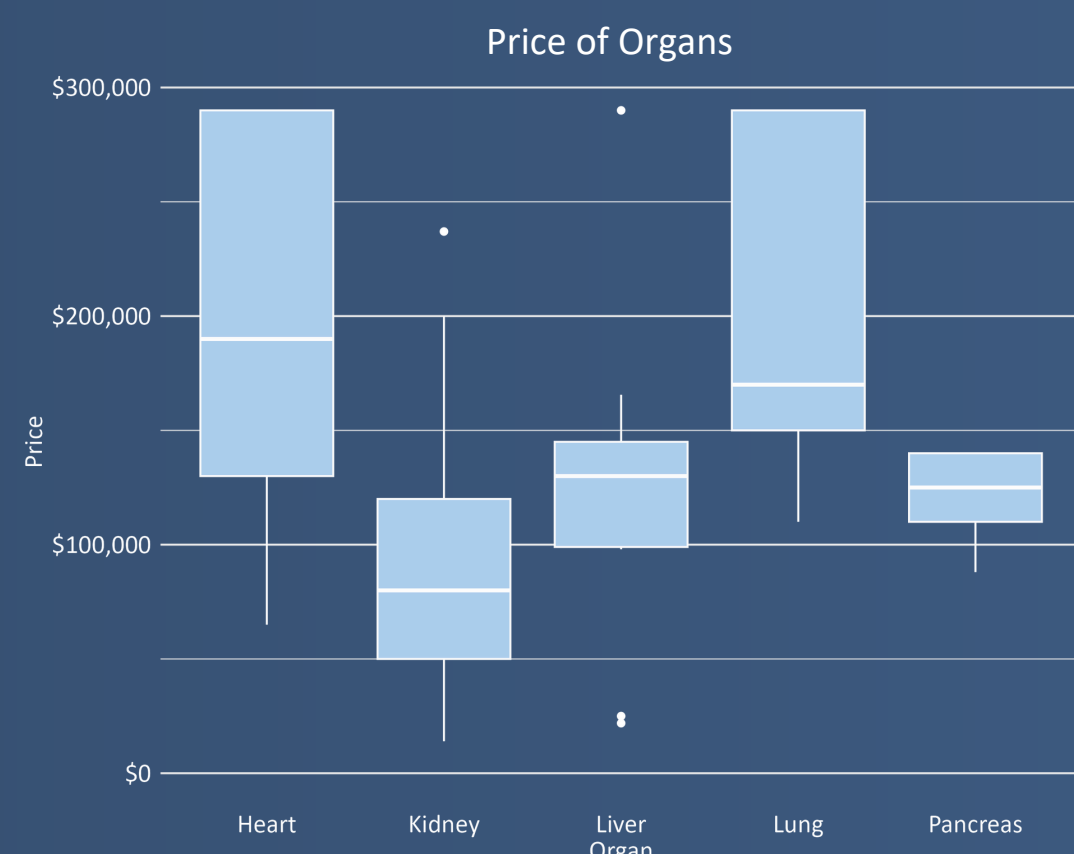
Some organs, such as lungs, tend to be less stable and even surviving the first year after a lung transplant does not significantly improve long-term survival prospects. Interestingly, transplanting the kidney and pancreas together appears to increase the survival rate compared to a single organ transplant.

## THE PERCENTAGE SHARE OF EACH ORGAN AMONG THE TOP 5 MOST POPULAR TRANSPLANTS



## HOW MUCH ARE YOU WORTH?

Since the demand for organ transplants is so high, some people turn to illegal and unethical means to obtain organs. According to Global Financial Integrity, the illegal organ trade generates approximately \$840 million to \$1.7 billion annually.



This boxplot illustrates significant variations in the prices of different organs. Hearts and lungs are the most expensive, with prices reaching nearly \$300,000. Kidneys, while the least expensive, can still cost almost \$250,000 in some cases. Overall, the price ranges for all organs are substantial.

The graph on the right illustrates the global flow of kidneys. The numbers above the arrows represent the amount of money earned by a broker who buys a kidney from a donor from one country and sells it to a recipient from another. The profits are estimated to be around the large value of \$100,000. Many observed transactions involved people from Israel. Since it's an illegal trade, the flow of organs is hard to track and the data is hard to obtain.

