

## Introduction

The life expectancy of patients with congenital heart disease (CHD) is impressively improved, however long-term complications do exist. We aimed to study the basic demographic and clinical characteristics of adult patients with congenital heart disease (ACHD) in Greece.

## Methods

In January 2012, a registry named CHALLENGE (Adult Congenital Heart Disease Registry. A registry from Hellenic Cardiology Society) was initiated. Enrollment of patients with structural CHD older than 16 years old was performed by 16 specialized centers nationwide. For the severity of CHD. Bethesda classification was utilized.

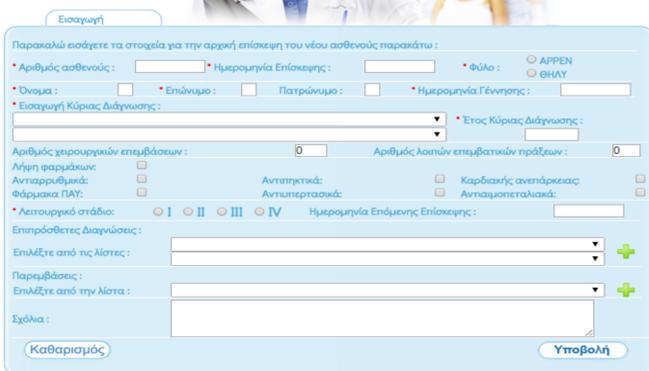



Figure 1: Data insertion in CHALLENGE registry

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## Results

Of 2304 patients with ACHD (mean age 38 years (SD 16), 51% women), 50% suffered from mild, 36% from moderate and 14% from severe ACHD. Atrial septal defect (ASD) was the most prevalent diagnosis (31%).

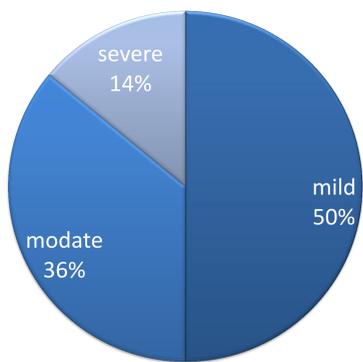
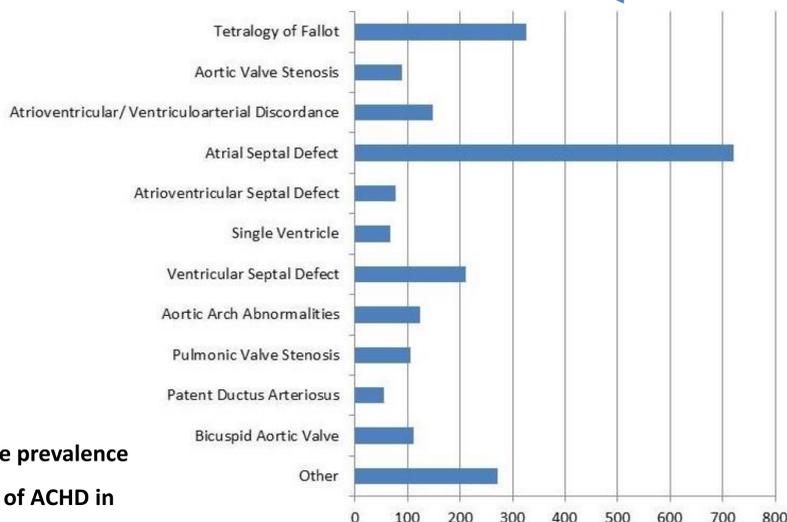


Figure 2: The severity of ACHD in the CHALLENGE registry

Figure 3: The prevalence of subtypes of ACHD in the CHALLENGE registry



## Results

Half of patients had undergone at least one open-heart surgery (51%), while 144 patients (6.3%) underwent 3 or more surgeries. Among the latter group (mean age 32, SD 11), the majority suffered from tetralogy of Fallot (n=62, 19% of tetralogy of Fallot patients), followed by patients with single ventricle (n=30, 44% of single ventricle patients) and atrioventricular/ventriculoarterial abnormal connections (n=20, 14% of patients with atrioventricular/ventriculoarterial abnormal connections).

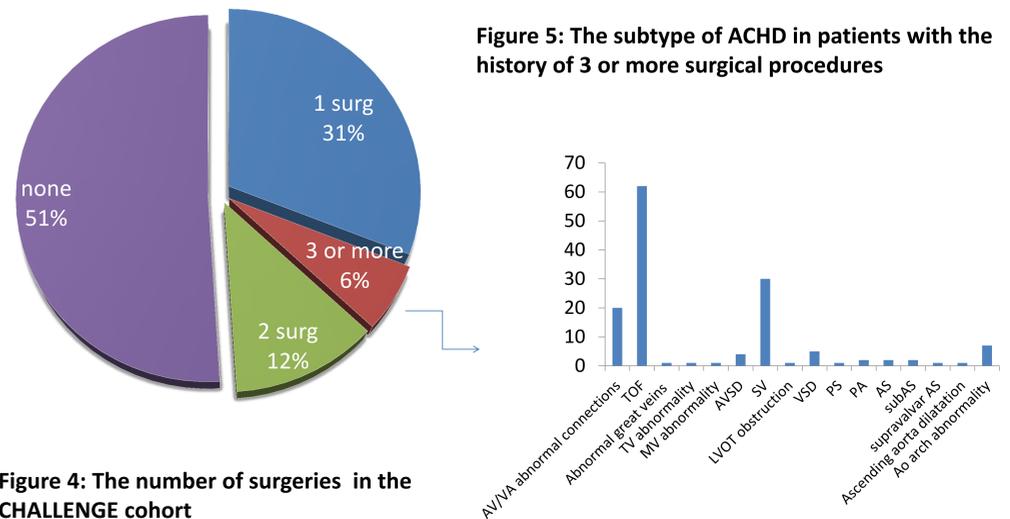


Figure 4: The number of surgeries in the CHALLENGE cohort

Figure 5: The subtype of ACHD in patients with the history of 3 or more surgical procedures

The vast majority of ACHD patients (93%) was asymptomatic or mildly symptomatic (NYHA class I/II). Elderly patients (>60 years old) accounted for 12% of the ACHD population. In total, 38% were under cardiac pharmacotherapy (15% under antiarrhythmic drugs, 15% under anticoagulants, 15% under heart failure medications and 4% under targeted therapy for pulmonary arterial hypertension).

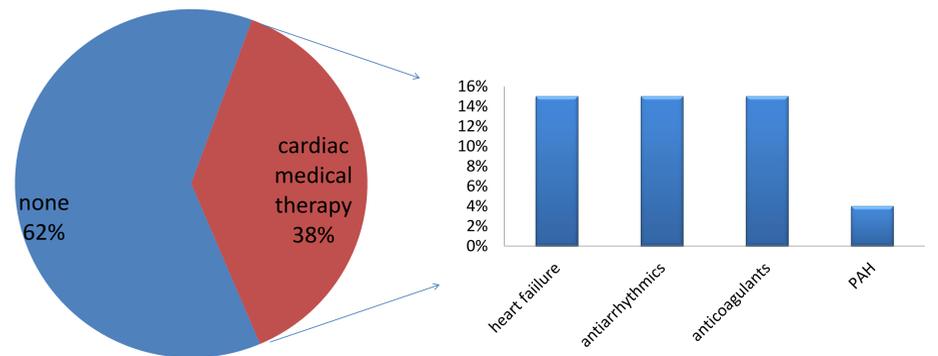


Figure 6: The incidence of cardiac pharmacotherapy in CHALLENGE cohort

Figure 7: The type of cardiac pharmacotherapy in the CHALLENGE cohort

## Conclusion

Patients with ACHD grow older, facing the long-term complications. More than one third of our cohort was receiving cardiac medication. Prospective national registries are of high importance to identify the ongoing needs of these patients and match them with the appropriate resource allocation.

## Declaration of Interest

This work was supported by Hellenic Cardiological Society (Grant Number: EKE/631/27-4-2016).

## References

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