

PRIMARY VASCULAR ACCESS TYPE AND SURVIVAL IN CHRONIC HAEMODIALYSIS PROGRAMME

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INTRODUCTION

For patients on chronic haemodialysis (HD), the arteriovenous fistula (AVF) represents the preferred mode of vascular access. In many cases the construction of an AVF was not successful even after multiple attempts. In these cases HD treatment was started with permanent cannula (PC).

Our dialysis center is responsible for the treatment of a quarter of a million population. The prevalence of dialysed patients 1083/mp. 23% of our prevalent dialysed patients were treated by peritoneal dialysis (PD) at the end of 2015.

OBJECTIVE OF THE STUDY

We monitored the survival of our patients on chronic HD according to the possibilities of vascular access. We collected these data every end of the year.

RESULTS

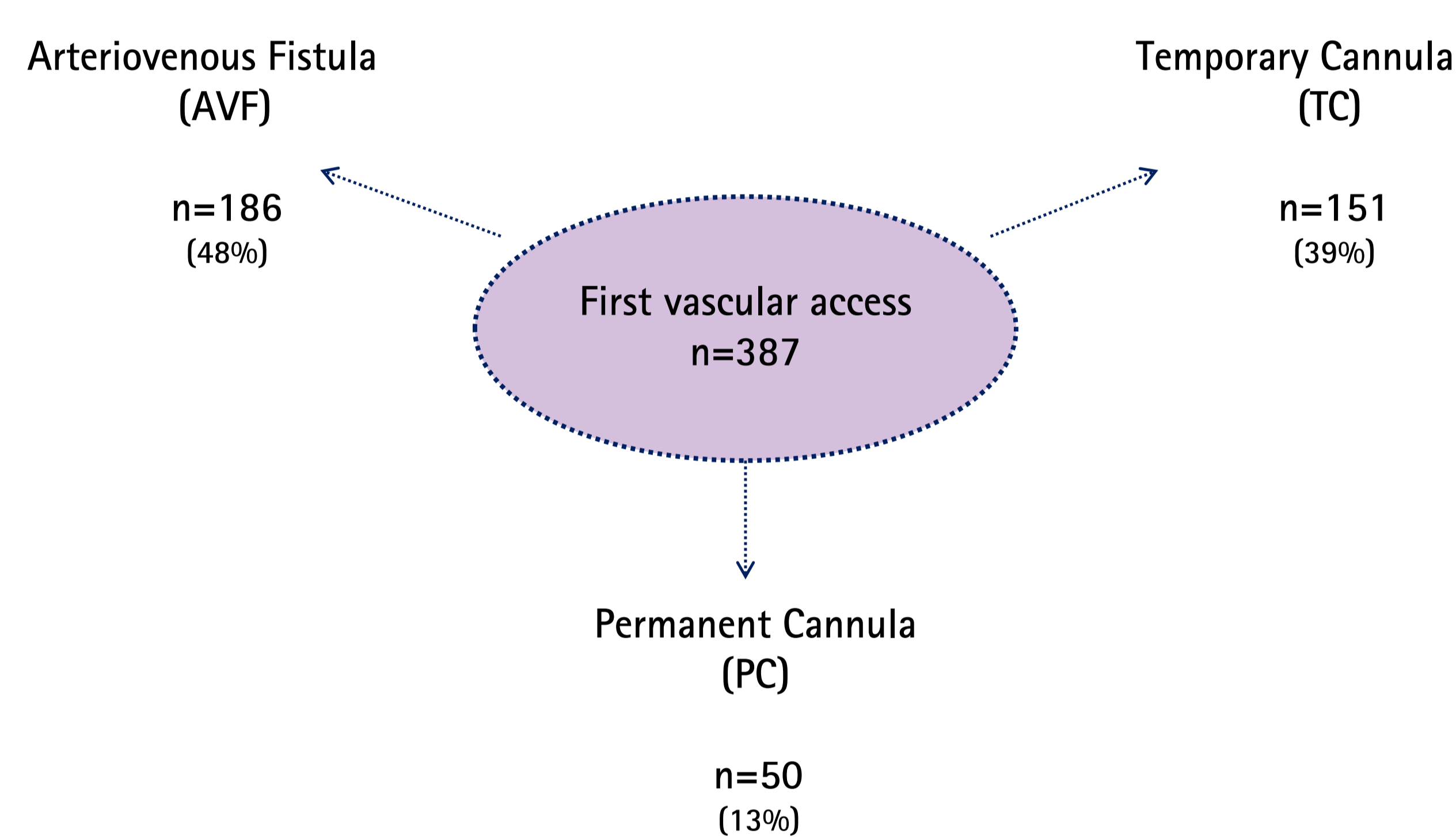
PATIENTS, METHOD

Between 1 January 2010 and 31 December 2015, we provided care for a total of 430 patients on chronic HD. 43 out of the 430 patients had been transferred into the HD programme from a peritoneal dialysis programme, while the other 387 patients received HD as the primary modality. A retrospective study of their survival until the end of December 2015 or up to the drop-out date was performed.

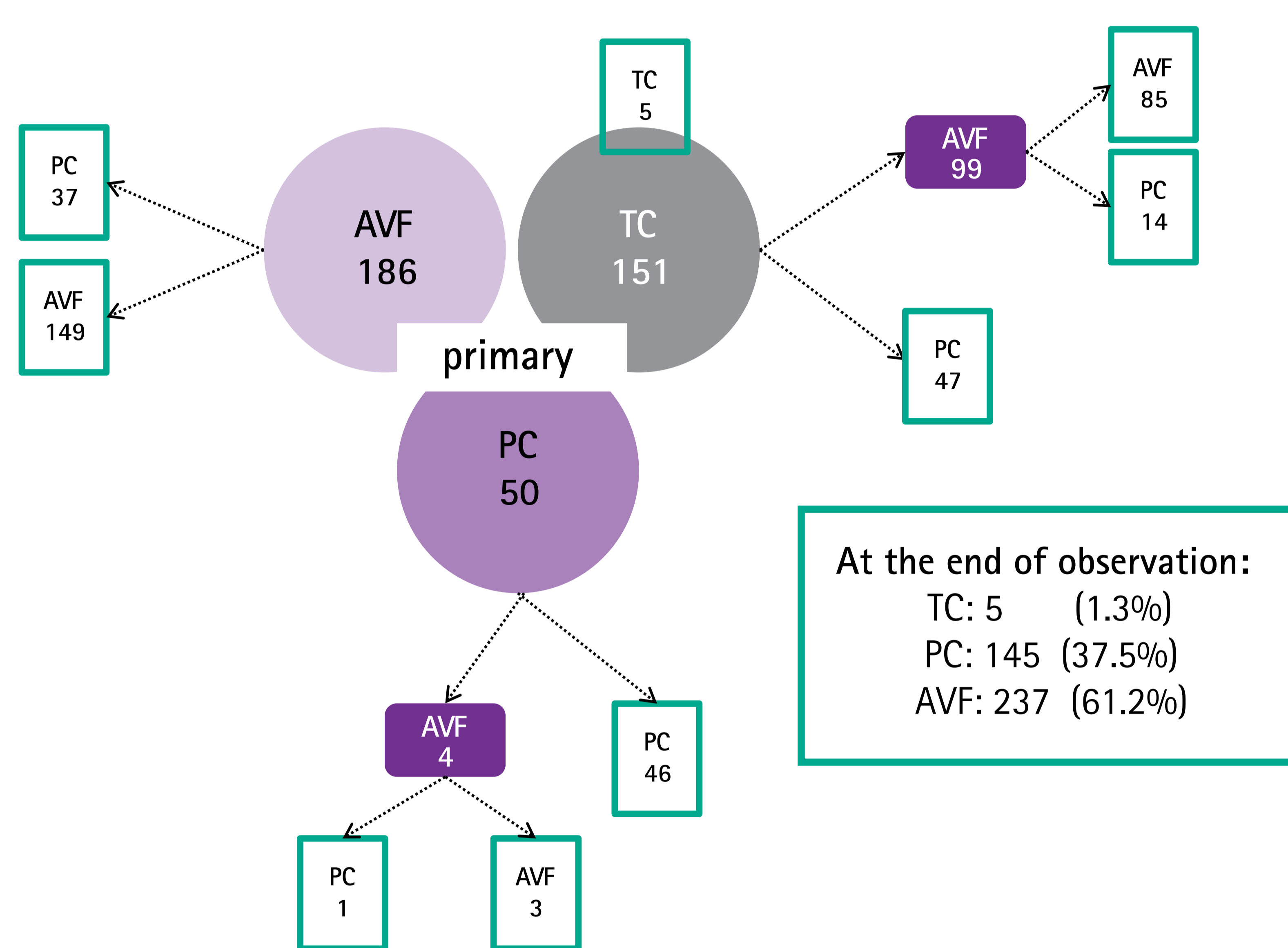
- Distribution by sex: women 195 / 192 men (50.4% / 49.6%)
- Average age of patients at start of dialysis: 68.9±13.5 years
- mean age of women: 71.5±13.9 years
- mean age of men: 66.1±12.5 years

We collect patient's data up to drop out (transplantation, death) or end of the year.

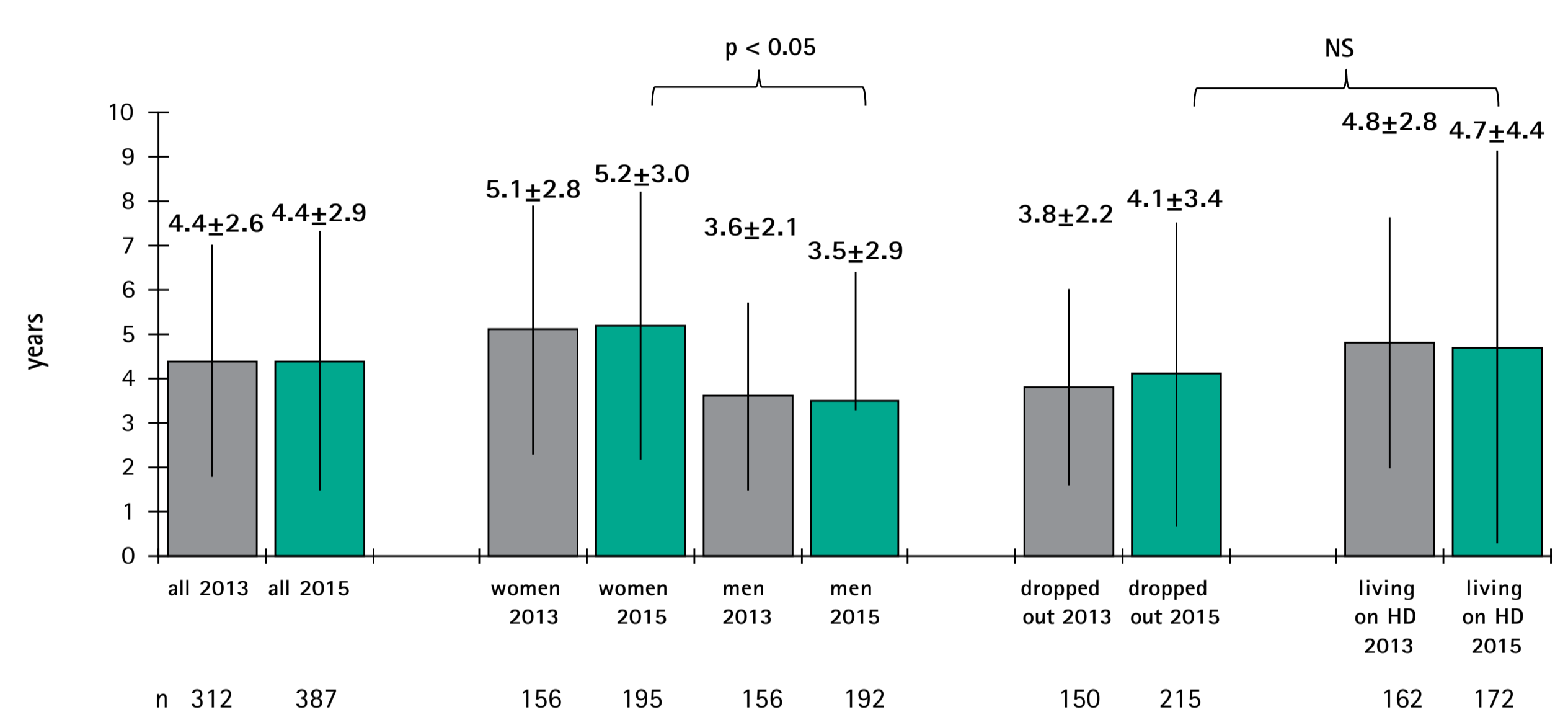
Primary vascular accesses



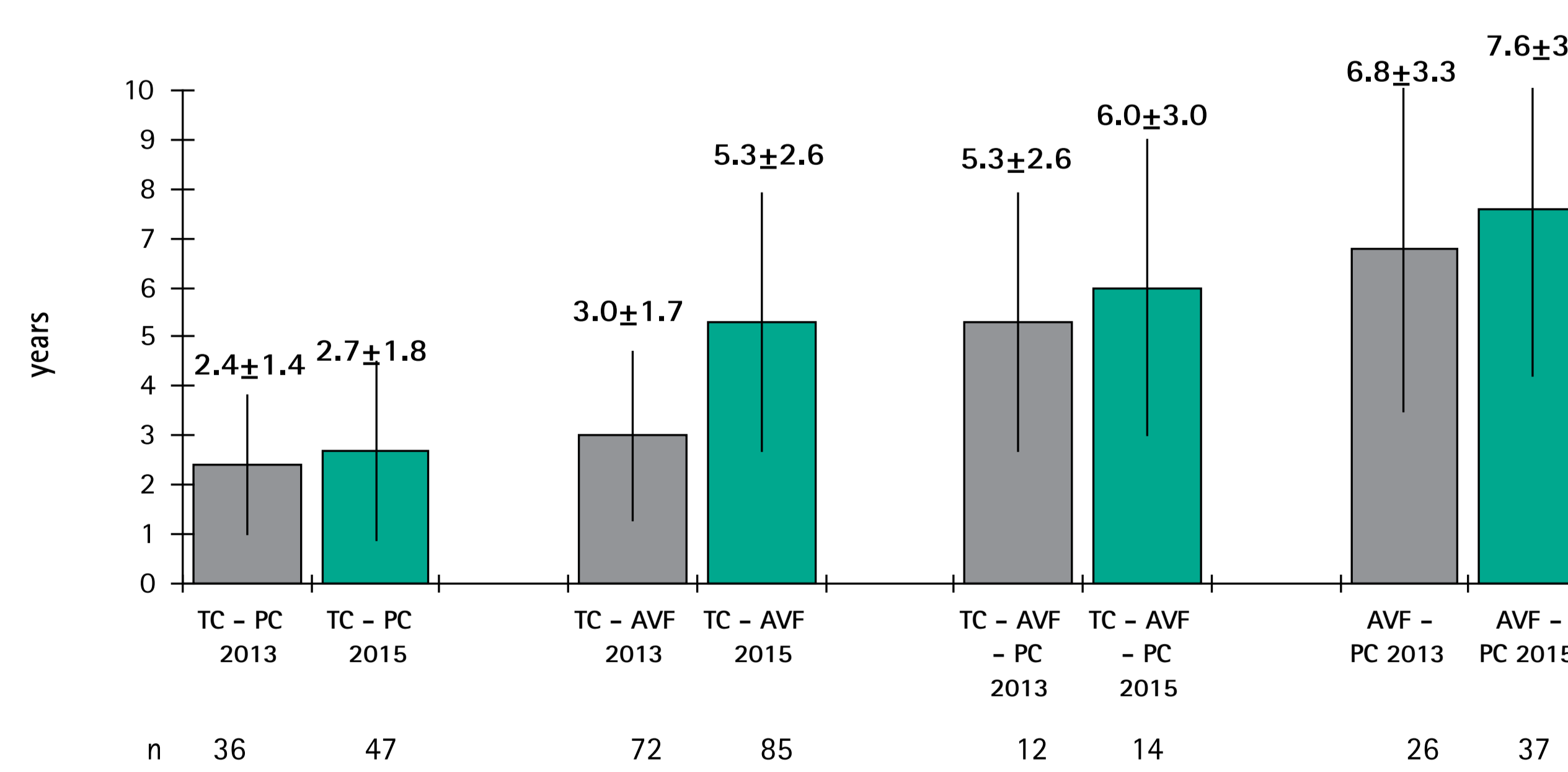
Primary and further vascular accesses n=387



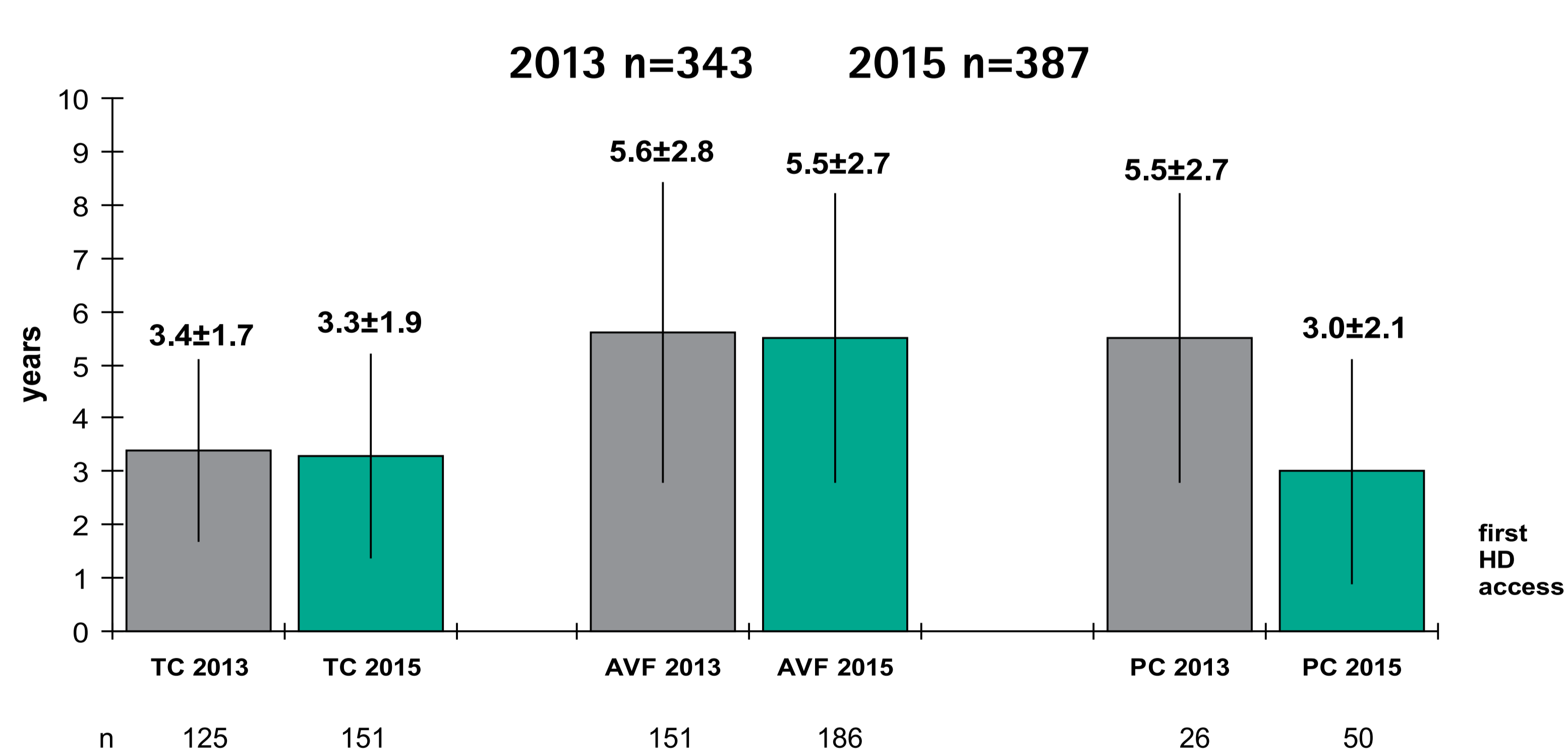
Average patients survival time on HD end of 2013 vs 2015



Average survival time according to primary vascular access with switching to another access end of 2013 vs 2015



Average survival time depending on the type of primary vascular access in all patients end of 2013 vs 2015



SUMMARY

- A high proportion of our chronic HD patients (39%) had a temporary cannula (TC) at the start of HD, unfortunately. The average age of these patients was higher than that of patients having AVF at the start of HD.
- At the end of observation (31 Dec 2015) 62% of HD patients had AVF and 38% were treated via PC (the peritoneal dialysis rate is high enough in our centre – 23% of all dialysed patients).
- The average patient survival time was 4,4 years (at the end of 2013 and 2015, also), in case of women it was higher than in case of men.
- According to the first vascular access the best survival was in the AVF group (almost twice better, than in TX group – even if an AVF was successfully constructed after the start of HD), especially in cases, when after a long treatment on AVF the patients switched to PC.
- The survival of patients starting on PC was surprisingly long at the end of 2013 (5.5 years), but it decreased significantly up to 31 Dec 2015, because of many new patients starting HD via PC.

CONCLUSION

As the survival chance of patients starting an HD programme with a TC is much lower, in the absence of an AVF the treatment should be started via a permanent large venous cannula, or even more preferably by the use of peritoneal dialysis.