Item 1

a) Yes, “Complications of peripherally inserted central venous catheters: A retrospective cohort study”.
b) Yes, the objective of study was determine the complications associated with peripherally inserted central catheters (PICCs) in a cohort of patients through a retrospective study. The abstract is structured with background and aim, methods, results and conclusions.

Item 2

Yes

Item 3

Yes, but we don’t include hypotheses.

Item 4

Yes

Item 5

Yes, In the Day Hospital, Marqués de Valdecilla University Hospital, in Cantabria, a region in northern Spain, between October 2010 and December 2013. Data collection was retrospective.

Item 6

a) Yes, The inclusion criteria were: male or female, ≥18 years old and carriers of PICCs during the study period.

The study population was all the patients carriers of PICCs during the study period, who were attended in In the Day Hospital in Cantabria, a region in northern Spain. The final study population were 603 patients.

b) Not applicable in our study
Item 7
Yes, The main study variables were: Date of birth, sex, medical diagnosis, nursing care of the catheter, location of the catheter, the total catheter days, reasons for withdrawal, and complications.

Item 8
Yes, The total catheter days were estimated like difference between the date of insertion and the date of withdrawal. This date was handled in the analyses like continuous quantitative variable.

The complications were categorized as infection, thrombosis, phlebitis, migration, edema, and/or ecchymosis.

The criteria for defining the occurrence of “infection” were the Central Line Associated Blood Stream Infection (CLABSI) (O’Grady, 2011).

The criteria for the diagnosis of “thrombosis” were initially the symptomatology and, finally, was confirmed by ultrasound.

The criteria for diagnosis of "phlebitis” (irritation of the venous endothelium by the catheter) were initially the symptomatology and, finally, was confirmed by ultrasound.

The criteria for determining the "migration" was when the catheter had moved outward more of two centimetres (displacement towards the exterior).

The criteria for the diagnosis of “edema” were swelling caused by fluid accumulation in the arm near the catheter insertion point.

The criteria for the diagnosis of " ecchymosis " were the presence of bruise near the catheter insertion point.

The catheter was considered with "lumen occlusion" when the catheter was not suitably permeable and it did not respond to fibrinolytic therapy or if fibrinolytic or anticoagulation therapy was contraindicated (Schiffer, 2013).

Item 9
Yes
**Item 10**

Yes, The study population was all the patients carriers of PICCs during the study period, who were attended in In the Day Hospital in Cantabria, a region in northern Spain. The final study population were 603 patients.

**Item 11**

Yes, see Statistical Analyses

**Item 12**

Yes, see “Statistical Analyses”

**Item 13**

a) Yes.

b) Not applicable in our study

c) Not applicable in our study

**Item 14**

a) Yes, see Table 4.

b) Yes, see Table 4.

c) Yes, see Table 4.

**Item 15**

Yes, see Table 3, 4 and 5.

**Item 16**

Yes, see Table 1-5.

**Item 17**

Yes.

**Item 18**

Yes.

**Item 19**

Yes. In retrospective studies based on secondary information (records), one of the main limitations could be the low quality of the information, owing either to incomplete records or a lack of agreement among the different
records. In our study, information about the main variables was collected in more than 90% of patients. Only, we have 67 missing in the variable “cause of withdrawal”. Another aspect to consider is the lack of availability of other potential confounders (presence of metastases), which are unavailable from the secondary registers used in our study.

**Item 20**
Yes.

**Item 21**
Yes.

**Item 22**
Not applicable in our study