The aim of this systematic review is to synthesise existing research regarding patient experiences of these CVADs to help clinicians guide, prepare, and support patients receiving CVADs for the administration of anti-cancer treatment” Ryan et al (2018).

**Abstract:**

**BACKGROUND:** Three types of central venous access devices (CVADs)-peripherally inserted central catheters (PICCs), skin-tunneled central catheters (Hickman-type devices), and implantable chest wall Ports (Ports)-are routinely used in the intravenous administration of anti-cancer treatment. These devices avoid the need for peripheral cannulation and allow for home delivery of treatment. Assessments of these devices have tended to focus on medical and economic factors, but there is increased interest in the importance of patient experiences and perspectives in this area. The aim of this systematic review is to synthesise existing research regarding patient experiences of these CVADs to help clinicians guide, prepare, and support patients receiving CVADs for the administration of anti-cancer treatment.

**METHOD:** A systematic search of MEDLINE, Embase, and CINAHL research databases will be carried out along with a supplementary reference list search. This review will include quantitative, qualitative, and mixed methods studies published in peer-review journals, reporting some aspect(s) of patient experiences or perspectives regarding the use of PICC, Hickman, or Port CVADs for the administration of anti-cancer drugs. The methodological quality and risk of bias of included papers will be assessed using the Mixed Methods Appraisal Tool (MMAT). Relevant outcome data will be extracted from included studies and analysed using a thematic synthesis approach.

**DISCUSSION:** The results section of the review will comprise thematic synthesis of quantitative studies, thematic synthesis of qualitative studies, and the aggregation of the two. Results will aim to offer an account of current understandings of patient experiences and perspective regarding PICC, Hickman-type, and Port devices in the context of anti-cancer treatment. Confidence in cumulative evidence will be assessed using the Confidence in the Evidence from Reviews of Qualitative research (CERQual) approach.
SYSTEMATIC REVIEW REGISTRATION: This systematic review protocol is registered with the International Prospective Register of Systematic Reviews (PROSPERO). Registration number: CRD42017065851. This protocol was prepared using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses for Protocols checklist (PRISMA-P) (Shamseer et al., BMJ 349: 2015).

Reference:
