Appendix 1: Table outlining the advantages and disadvantages of different CVADS.

	Advantages	Disadvantages
General (all CVADs)	•Reduces the need for repeated peripheral cannulation/venepuncture. •Reduces trauma and anxiety to the patient relating to treatment delivery ie less pain and trauma caused by frequent cannulation and drug administration. •Provide long-term venous access. •Provide a safer route of administration for vesicant therapy than peripheral or midline access as there is a less risk of extravasation with CVADs than peripheral devices (refer to the extravasation CPG).	•Increased risk of infection. •They all require routine care and maintenance to facilitate their effectiveness. •Placement of CVADs poses a potential risk to the patient for developing bleeding, venous obstruction, cardiac tamponade, emboli, SVC/IVC obstruction and sepsis. •CVADs have an increased risk of developing thrombi and/or fibrin sheaths.
Skin tunnelled cuffed central venous catheters (CVC)	•Does not require a needle to access. •Has a lesser risk of extravasation than a Port as catheters are anchored in situ with a dacron cuff. •Easy to access & use	•Cosmetically visible causing some patients issues with body image. •Higher risk of accidental damage and removal compared to Implanted ports. •Potentially may have a greater risk of developing a catheter-related infection than PICCs and Implanted ports. •Extra care is required when bathing. •Swimming is not recommended in immunosuppressed children. •Weekly dressing changes which some children find traumatic
PICCs	•These are commonly inserted	•Not generally used for long

	in the veins above the antecubital fossa. •May be inserted without the use of a general anaesthetic. •They can be removed by an experienced nurse/doctor in the ward environment, without the need for an anaesthetic.	term IV therapy (>6 months), but have been used for longer when required. •Accidental damage and/or removal, due to their small lumen size, placement and inadequate securing in paediatric patients. If not adequately secured under a dressing there is a risk a hole/split or break may occur, thus requiring repair or removal
Implanted ports (Ports)	•Cosmetically less noticeable and may improve body image concerns. •Probable lower risk of infection than external catheters (Loveday 2014). •Less risk of accidental damage to the device. •Require less care and maintenance than external devices (only monthly flushes required). •Children/young people can go swimming when the Port needle is not in situ.	•Not suitable for a needle phobic child. •Ports may not be suitable for the administration of long-term continuous vesicant therapy such as PN (Rationale 1). •Ports may not be advisable for in very obese or very underweight children (Rationale 2).