

## Journal Article Summary Worksheet

<b>Article Title</b>	
Implanted vascular access device related deep vein thrombosis in oncology patients; A prospective cohort study. (Aug 2015 – Sept. 2017, Data collected at Ottawa Hospital)	
<b>Name of Journal /Date</b>	
Thrombosis Research / February 2019 Authors: Suleman A, Jarvis V, Hadziomerovic A, Carrier M, McDiarmid S	
<b>Study Objectives</b>	
Assess the incidence of Implanted Vascular Access Device (IVAD)-related upper extremity deep vein thrombosis (UEDVT) associated with the AngioDynamics BioFlo Port.	
<b>Study Design/Methods</b>	
Number of Patients	501 cancer patients were assessed for eligibility – (501 BioFlo ports placed) 394 of those patients enrolled in the study 389 of those patients were enrolled over 12 months & included in the final analysis *breakdown why certain patients were excluded and removed in Fig 1
Patient Groups	<b>Prospective single center cohort study</b> – study followed one group of patients after the port was implanted for a timeframe of 12 months, or until a patient received an anticoagulant, the catheter was removed, or death.
Primary Endpoints	Incidence of IVAD-related UEDVT associated with BioFlo ports where IVAD-related UEDVT was defined as symptomatic ipsilateral upper extremity (axillary vein or proximal) DVT and symptomatic Pulmonary Embolism (PE)
Secondary Endpoints	Retrospective studies, assessing the incidence of IVAD-related UEDVT associated with other ports – specifically the Bard X-port ISP.
<b>Study Results</b>	
<ul style="list-style-type: none"> <li>• Of the 389 patients included in the analysis, it was determined that only 5 patients (1.29%) had symptomatic port-related UEDVT (1.29%, 95% CI 0.2-5.2%)</li> <li>• In a previous study at the same institution with similar sample size and patient population, the port-associated DVT rate was 4.5% (X-port ISP, Bard Access Systems Inc, Salt Lake City, US). <b>This represents a 71% reduction of port-associated DVT</b> [<math>1 - (1.29/4.5) = 71\%</math>]</li> <li>• The median age of the cohort was 58.2 years; 68% (n=273) were females. Sixty-six percent had gastrointestinal cancer (including pancreatic cancer) and 68% had metastases. Eighty four percent of IVADs were right sided insertions. Ninety eight percent of catheter tip placements were distal superior vena cava (n=237), cavo-atrial junction (n=67) or atrium (n=90)</li> </ul>	
<b>Study Conclusions</b>	
<ul style="list-style-type: none"> <li>• IVAD-related UEDVT is an infrequent complication in cancer patients with BioFlo ports</li> <li>• Specifically, using a BioFlo port can reduce port-associated UEDVT by 71%</li> <li>• The risk of thrombotic catheter complications that are associated with increased morbidity, mortality, healthcare costs and diminished quality of life may be reduced by the use of the BioFlo*port</li> </ul>	



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**Points/Key Take-Aways**

- This study suggests that cancer patients who receive an implanted BioFlo port have a reduced chance of getting an upper extremity DVT
  - We can make this determination because the rate of symptomatic IVAD-related UEDVTs reported in this study is lower than other previously reported rates.
  - While this study reported rates at 1.29%, other studies retrospectively reported rates of VTE complications ranging between 3.8% – 5.5%, with 4-10% being the estimated industry standard.
  - And while the difference between 1.29% and 4.5% may not be initially overwhelming, the difference is important to note when considering patient outcomes.
    - **Especially when VTE is the second leading cause of death in cancer patient**
- AngioDynamics BioFlo port reported a lower rate of IVAD-related UEDVT when compared to the Bard X-port ISP. The Bard port reported a 4.5% incidence rate of UEDVT in a similar cohort study (article 10 in references).
  - *Incidence and risk factors of symptomatic venous thromboembolism related to implanted ports in cancer patients* - retrospectively assessed the incidence of IVAD-related UEDVTs associated with the Bard X-port ISP (4.5%, 95% CI, 2.5 to 6.3%)

Possible Objections	Response
<ol style="list-style-type: none"> <li>1. Because cancer patients are at higher risk of VTE complications, it is challenging to determine if the VTE is related to the port or not.</li> <li>2. The study did not include a control group comparing ports. Therefore, it is difficult to determine whether the low risk of IVAD-related DTVs is attributed to the BioFlo port itself, or the highly trained specialized team that implanted and cared for the port.</li> </ol>	<p><b>A)</b> Always note their point is valid  <b>B)</b> Circumvent the discussion back to the key points/take-aways:</p> <ul style="list-style-type: none"> <li>• While that point is valid, I feel we cannot ignore the difference in reported symptomatic IVAD-related UEDVTs when retrospectively compared to previous studies.</li> <li>• This study reported rates at 1.29% while other studies reported rates of VTE complications ranging between 3.8% – 5.5%.</li> <li>• This difference may not be overwhelming, but when it comes to patient outcomes, the difference is important to note.</li> </ul>

**In What Sales Scenarios Would You Use this Study?**

- A) Selling BioFlo ports
- B) Selling BioFlo ports against Bard X-port ISP
- C) Upselling existing business to BioFlo – Ex: Xcela Plus to BioFlo port



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