

LETTER

# Commentary and Critique to "VTE Prophylaxis Therapy: Clinical Practice vs Clinical Guidelines" by Abukhalil et al [Letter]

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# Dear editor

We read with enthusiasm the article "VTE Prophylaxis Therapy: Clinical Practice vs Clinical Guidelines" by Abukhalil et al<sup>1</sup> since they report major problems regarding inpatient VTE prophylaxis practices that need to be addressed. However, some important points attracted our attention that we think are of particular importance. We had published an article<sup>2</sup> on the same subject and had used similar methodology to obtain data, thus we are thoroughly familiar with the content. Although our article reports the similar finding that inappropriate VTE prophylaxis is also common in our tertiary care academic center, we also have contrasting data. While Abukhalil et al's article reports that 144 out of the 296 patients received prophylaxis although not indicated, namely overuse, our overuse rate was only 8 out of the 206 patients. This significant discrepancy may have emanated from two reasons:

First of all, a limitation reported by the authors is the lack of BMI records for most of the patients. Since obesity adds one point to the Padua risk assessment model and obesity is highly frequent among the middle east region<sup>3</sup> where the study was conducted, this limitation is not a minor issue and it might have caused the Padua risk scores to be underestimated by 1 point for obese patients. This underestimation may be the first reason for the reported high overuse rate.

Another reason for the discrepancy may be the fact that the authors have defined the appropriate candidates of prophylaxis as those patients with a Padua score ≥4 and an IMPROVE bleeding score <7. Although an IMPROVE score ≥7 is associated with increased risk of bleeding, higher scores do not directly preclude VTE prophylaxis but rather they are a caveat to the clinicians to assess risk-benefit ratio. Defining patients whose Padua and IMPROVE bleeding scores are over 4 and 7, respectively, is somewhat arbitrary. A common scenario: an elderly obese male patient with an underlying lung cancer admitted to an ICU with pnuemosepsis requiring central venous catheter has an IMPROVE score of 9 but also has a Padua score of 10. According to the presented dichotomous logic, this patient should directly be precluded from receiving VTE prophylaxis due to the high IMPRROVE score even though he has high Padua score. Therefore, defining patients with Padua score ≥4 and IMPROVE bleeding score ≥7 as inappropriate might be the second reason for the reported high overuse rate.

### **Disclosure**

The authors report no conflicts of interest in this communication.

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