

## **Angiogenesis inhibitors from natural sources**

### **ABSTRACT**

A multi-target strategies targeting on various biochemical and physiological pathways implicated in tumour pathogenesis should be developed with the ultimate aim to manage patients with cancer and reduce the normal-tissue toxicity. Tumor angiogenesis has been recently discovered as an important strategy in treating cancer as most tumors rely on angiogenesis to survive, develop, invade and metastasize. Targeting angiogenesis to inhibit the progression of tumorigenesis has recently been a focus in developing novel anti-cancer development. This is mainly due to the specificity that anti-angiogenic possesses: it targets on newly-formed blood vessels and spares the existing ones. With that being said, inhibiting angiogenesis is now considered a promising strategy in the development and selection of new anti-cancer drug candidates. To date, there are cytotoxic drugs which also exhibit antiangiogenic activity but not angiogenesis inhibitors in whole. In this chapter, we will be discussing selected natural sources including marine products which have been investigated for their antiangiogenic activities. Various methods in validating the effects as well as their possible multiple pathways will also be contended in this chapter.

Keyword: Angiogenesis; Antiangiogenic; Cancer development; Marine products; Phytochemicals