TECH OFFER

Tentatorch – Disposable Vein Finder

OVERVIEW
Venepuncture is challenging in patients with conditions that cause difficulties in locating their veins (E.g. Renal failure, obesity, intra-venous drug use, and elderly patients). Multiple unsuccessful venepuncture attempts cause pain, delays in clinical investigations and treatment. Our Vein finder device aims to help procedurists locate the vein easily and reduces the number of attempts and duration needed to obtain venous access in difficult cases. We are looking for partners to commercialise the device.

TECHNOLOGY FEATURES & SPECIFICATIONS
TenTaTorch utilizes the principle of transillumination to visualize veins invisible to the naked eye. Independent light sources are mounted on individual fingers which allow procedurists to: Visualize superficial veins as a silhouette Perform real-time cannulation under direct vision Increase visualization field by increasing the number of devices mounted Anchor veins in a stable position during venepuncture Have an unrestricted view of the area of illumination

POTENTIAL APPLICATIONS
Venepuncture is one of the most commonly performed clinical procedures. Up to 84% of patients admitted in a hospital require venepuncture. Venepuncture is challenging in patients with co-morbidities that predispose them to have inaccessible veins. These include patients with renal failure, obesity, a history of intra-venous drug use, and elderly patients. TenTaTorch would be 10 to 100 times cheaper compared to existing commercial venepuncture assistive devices. The cost of existing commercial devices range from SGD$600 TO SGD$20,000. The marketing strategy for TenTaTorch would comprise: 1. An affordable and disposable device that would have a cost similar to a commonly done basic blood investigation (eg. Full blood count) 2. Device would be disposed after a patient’s admission or be kept by the patient for use during his or her future clinic appointments or admissions 3. Device would be made available to not just healthcare workers, but also to patients – this is an affordable device that can be made available over-the-counter at pharmacies/retail shops 4. Patients who have difficult venous access would be able to request for healthcare workers to prophylactically use the device to prevent unwanted unsuccessful venipuncture attempts Other areas of use include the field of Vascular Surgery and Plastic Surgery. The device can be used to locate veins for procedures such as vein grafting or lymphovenous anastomosis. An affordable device would allow commercialization in developing nations and the use during humanitarian missions.