



WHAT IS **HAEMATOBIOPSY**? WHAT ARE THE IDEAL FEATURES FOR A HAEMATOBIOPSY NEEDLE?

INTRODUCTION:

All available needles in the market, either for bone biopsy and bone-marrow aspiration, do not provide a complete solution to the invasiveness of maneuver, its success and adequacy of specimens acquired. On the contrary, some which concentrate on improving an aspect of maneuver have made other aspects worse! In regard of diagnostic accuracy, pathologists often claim fragmented and/or small specimens and not full adequacy of bone-marrow.

An **IDEAL NEEDLE** should deliver the following overall results:

- ALWAYS guarantee recovery of the biopsy fragment
- Provide a **COMPLETE** fragment with the greatest length possible (for greater presence of trabecular bone)
- Allow bone marrow aspiration **AFTER** biopsy and not before, in the same intervention
- Be of EASY and RAPID MANOEUVRABILITY
- Be MINIMALLY INVASIVE

PARAGON®, NEEDLE FOR HAEMATOBIOPSY

The experience gained over the past years with the BEST® needle and with the acquirement of the latest manufacturing technologies and design have now allowed us to achieve the starting project: a needle with all the ideal features described above, a needle for HAEMATOBIOPSY:

PARAGON®

PARAGON[®] is a needle which contains a preassembled "spade" closing the base of the fragment and its command device, called SAFE-LOCK[®]; pyramidal point (four edges) centimetre marked stylet; iopsy cannula with highly sharpened locking mouth and LuerLock fitting for aspirating bone-marrow through a syringe.



Handle is also innovative; it is asymmetric in shape and delivers high comfort and considerable safety regarding penetration movement, which is alternated right and left and no longer rotatory.

SAFE-LOCK[®] is activated by simply pressing a button on the handle and luxation (detachment) of the base of the fragment from the surrounding bone tissue is achieved by twisting the instrument by turning it on itself.

Fragment is removed by unthreading the SAFE-LOCK® from needle still in situ; herefore, making the needle available for bone marrow aspiration after biopsy.

The entire manoeuvre - sectioning and retrieving fragment, aspirating bone-marrow - takes place in a very short time and is so simple and instinctive that even an untrained physician (or a nurse) could perform the procedure!

Moreover, since **PARAGON**[®] avoids the insertion of devices retaining the fragment (Best[®], Trap-System[®]) and probes ejecting the fragment from the needle, risks of accidental puncture resulting in dangerous infections for operators are eliminated.

Clinical tests conducted up to now have shown that the fragment retaining system (SAFE-LOCK®) does not ever fail, either in the malacic bone (trabecular jam type) or in *osteopetrosis* (literally "stone bone") or *histiocytosis*.

Those features alone should be sufficient to make **PARAGON**® an exceptional needle.

It should also be noted that, equal to the diameter of the fragment, **PARAGON**[®] uses a **9G cannula**, compared to the 8G Jamshidi type (with or without the Trap-System[®]) and the Snare Lock[®] (0.7 mm smaller!)

In **PARAGON**'s range, size **11G** (0.5 mm smaller than the Sterylab 9G, 1.20 mm smaller than the traditional 8G) should be highlighted since, although delivering a barely discernibly thinner fragment, allows greater penetration and increased fragment length: diagnostic potential is therefore increased due to reduced presence of cortical bone in respect of the total length of the fragment.

PARAGON 11G has all properties to become the standard reference needle of the future.

WE CAN NOW CONFIRM THAT "PARAGON", HAS ALL FEATURES REQUIRED FOR AN IDEAL HAEMATOBIOPSY NEEDLE!