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## Sysmax XE 2100: Can be used an Early Detection of HPCs among T/HS?

**Manoj Kumar\***

Research Associate, Department of Emergency Medicine, JPN Apex Trauma Centre, All India Institute of Medical Sciences, New Delhi, India

### Letter to the Editor

Despite, flow cytometry is the recommended for quantification of hematopoietic stem cell count with (monoclonal antibody) MoAb anti-CD34: This however required skilled personal and expensive procedure and is a time consuming [1]. Need alternative method for the determination of peripheral blood hematopoietic progenitor cells (HPCs) among trauma hemorrhagic shock.

Sysmex XE 2100 is automated haematology analyser. This is a very fast (90 second), user friendly, cheapest alternative method for determination of peripheral blood HPCs [1,2]. Sysmex XE2100 does not require MoABs and it can also be used for the quantification of complete blood count and leukocyte differential count. Basic principle of Sysmex XE-2100 automated haematology analyzer has immature myeloid information (IMI) channel which are used for quantification of HPCs per microliter of blood. The IMI channel of the Sysmex system lyses mature and erythropoietic cells by means of a special lyse reagent. Cells in the area of low volume and a reduced plasma/nucleus relation are detected as HPCs and analyzed using a special HPCs software program. HPCs like all immature cells, are resistant to the lytic reagent and are located within a specific gated area of the scattergram [1,2].

Recently, In T/HS patients, peripheral blood HPCs was measured by sysmex XE 2100 [2]. Elevated peripheral blood HPCs has been proved in trauma hemorrhagic shock (T/HS) patients [3]. Recently, Kumar et al. reported that elevated level of peripheral blood HPCs are not only connected with HF and also associated with the poor outcome among T/HS [2,3]. Mobilization of hematopoietic progenitor cells (HPCs) from BM in to peripheral blood is associated with the suppression of HPCs. Therefore, to explore the sysmex XE 2100 can be used an early detection of peripheral blood HPCs among T/HS.

### References

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#### \*Correspondence:

Manoj Kumar, Research Associate,  
Department of Emergency Medicine,  
JPN Apex Trauma Centre, All India  
Institute of Medical Sciences, New  
Delhi, India.

**Tel:** 9654965259

**E-mail:** manojaiims84@gmail.com

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