

## SULFATED GLYCOSAMINOGLYCANS FROM MONONUCLEAR CELLS FROM HEALTHY DONORS AND PATIENTS WITH HEMATOLOGICAL TUMORS.

Dominato, J.A.A.<sup>1</sup>; Dreyfuss, J.L. <sup>1</sup>; Mendes, A. <sup>1</sup>; Schimieguel, D.M. <sup>2</sup>; De Oliveira, J.S.R. <sup>2</sup> and Nader, H.B. <sup>1</sup>.  
[julianadominato@gmail.com](mailto:julianadominato@gmail.com)

<sup>1</sup>Departamento de Bioquímica, UNIFESP, Rua Três de Maio, 100 - São Paulo, SP, 04044-020, <sup>2</sup>Departamento de Medicina, Disciplina de Hematologia, UNIFESP, Brazil.

The aim of this study is to investigate the expression of glycosaminoglycans in cultures of mononuclear cells from bone marrow of donors and patients bearing Acute Lymphoid Leukemia (ALL), Acute Myeloid Leukemia (AML), Hodgkin's Lymphoma (HL) and Multiple Myeloma (MM). For cells from donors, MM and ALL the studies were performed before and after mobilization with growth factors. Mobilization therapy was accomplished using G-CSF which leads to an increase in CD34<sup>+</sup> BM cell proliferation. The expression of sulfated glycosaminoglycans was analyzed after exposing the cells to [<sup>35</sup>S]-sulfate for 18 h. The results showed that all samples synthesize heparan sulfate (HS) and a hybrid compound with that migrates between chondroitin sulfate (CS) and dermatan sulfate (DS). These results were further confirmed by degradation with specific enzymes (chondroitinases and heparitinases). The profile of the compounds is disease specific and the cells respond differently to mobilization (value between brackets). (supported by CNPq, CAPES, FAPESP).

Cases	Cell extract (%)		Medium (%)	
	HS	CS/DS	HS	CS/DS
Donors	37.8 (39.8)	62.1 (60.2)	37.6 (26.4)	62.4 (73.6)
ALL	20.8 (9.8)	79.2 (90.2)	8.3 (25.7)	91.7 (74.3)
AML	33.3	66.7	16.0	84.0
HL	31.8	68.2	25.0	75.0
MM	27.5 (23.4)	72.5 (76.6)	15.8 (9.1)	84.2 (90.9)