Differentiation of single lymphoma primary cells and normal B-cells based on their adhesion to mesenchymal stromal cells in optical tweezers.

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| No. | Sex/Age | Diagnosis | Presentation Extranodal vs N odal | Material | Site of involvement/ Source of FNAB / surgical specimen | Composition of cell suspension by FCM |
|-----|---------|------------------------|---|----------|--|--|
| 1. | M/50 | DLBCL, NOS, non-GCB | E | FNAB | cLN | 42% of B-NHLs, 55% of T, 2% of M, 1% of NK |
| 2. | M/75 | DLBCL, NOS, non-GCB | E | FNAB | stT | 56% of B-NHLs, 3% of B, 26% of T, 3% of NK, 12% of D |
| 3. | M/39 | DLBCL, NOS non-GCB | Е | FNAB | ingLN | 52% of B-NHLs, 38% of T, 2% of B, 8% of M |
| 4. | F/46 | DLBCL, NOS, GCB | E | FNAB | cLN | 96% of B-NHLs, 3% of T , 1% of NK |
| 5. | F/61 | DLBCL, NOS, GCB | E | FNAB | ingT | 91% of B-NHLs, 1% of B, 7% of T, 1% of NK |
| 6. | F/54 | DLBCL, NOS, GCB | N | FNAB | cLN | 41% of B-NHLs, 5% of B, 48% of T, 5% of M, 1% of NK |
| 7. | F/88 | DLBCL, NOS, GCB | Ν | FNAB | cLN | 87% of B-NHLs, 9% of T, 3% of NK, 1% of M |

| 8. | M/62 | DLBCL, NOS, GBC | Ν | FNAB | cLN | 63% of B-NHLs, 1% of B, 28% of T, 2% of NK, 6% of M |
|-----|------|---|---|------|--------------------|---|
| 9. | F/55 | DLBCL, NOS, GCB | Е | FNAB | abT | 24% of B-NHLs, 9% of B, 57% of T, 10% of M |
| 10. | M/44 | DLBCL, NOS, GCB | N | FNAB | cLN | 34% of B-NHLs, 3% of B, 60% of T, 3% of NK |
| 11. | F/54 | DLBCL, NOS, non- GCB | N | FNAB | abLN | 50% of B-NHLs, 8% of B, 38% of T, 4% of NK |
| 12. | M/32 | DLBCL, NOS, intermediate between GCB and non- GCB | N | FNAB | cLN | 23% of B-NHLs, 3% of B, 65% of T, 5% of NK, 4% of M |
| 13. | F/61 | DLBCL, NOS, non- GCB | N | FNAB | cLN | 24% of B-NHLs, 7% B, 65% of T, 3% of M, 1% of NK |
| 14. | F/74 | PCDLBCL leg type, | Е | FNAB | skinT of the leg | 45% of B-NHLs, 3% of B, 23% of T, 15% of M, 14% of NK |
| 15. | F/73 | PCDLBC, leg type | Е | FNAB | skinT of the leg | 13% of B-NHLs, 58% of T, 19% of NK, 10% of M |
| 16. | F/84 | HGBL, NOS, between GCB and non- GCB | Е | FNAB | nasal cavityT | 44% of B-NHLs, 2% B, 41% of T, 9% of NK, 4% of M |
| 17. | M/37 | HGBL, NOS, GCB | N | FNAB | cLN | 66% of B-NHLs, 1% of B, 28% of T, 5% of NK |
| 18. | M/59 | HGBL, NOS, GCB | Е | FNAB | st of left forearm | 75% of B-NHLs, 5% of B, 12% of T, 5% of M, 3% of NK |
| 19. | M/71 | HGBL, NOS, non- GCB | Е | FNAB | stT | 70% of B-NHLs, 23% of T, 4% of NK, 3% of M |
| 20. | M/60 | HGBL, NOS | Е | FNAB | skinT | 97% of B-NHLs, 2.5% of T, 0.5% of NK |
| 21. | F/70 | FL | Е | FNAB | abT | 86% of B-NHLs, 5% of B, 8% of T, 1% of NK |
| 22. | F/79 | FL | Ν | FNAB | abLN | 65% of B-NHLs, 4% of B, 30% of T, 1% of NK |
| 23. | F/49 | FL | Ν | FNAB | cLN | 24% of B-NHLs, 3% of B, 67% of T, 3% of M, 3% of NK |
| 24. | F/66 | FL | Ν | S | abLN | 86% of B-NHLs, 14% of T |
| 25. | M/65 | FL | N | S | cLN | 53% of B-NHLs, 46% of T, 1% of NK |
| 26. | M/56 | FL | N | FNAB | ingLN | 42% of B-NHLs, 7% of B, 46% of T, 3% of NK, 2% of M |
| 27. | M/32 | FL | Е | FNAB | abT | 95% of B-NHLs, 5% of T |
| 28. | M/70 | FL | N | FNAB | cLN | 53% of B-NHLs, 19% of B, 26% of T, 2% of NK |
| 29. | F/67 | FL | N | S | cLN | 47% of B-NHLs, 14% of B, 37% of T, 1% of NK, 1% of M |
| 30. | F/86 | MCL | Ν | FNAB | abLN | 96% of B-NHLs, 4% of T |
| 31. | F/69 | MCL | Ν | FNAB | cLN | 86% of B-NHLs, 0.5% of B, 10% of T, 2,5% of NK, 1% of M |

| 32. | M/UK | MCL | Е | S | gastric and | 95% of B-NHLs, 5% of T |
|-----|------|------|----|------|-----------------|---|
| | | | | | duodenal mucosa | |
| 33. | F/66 | MCL | РВ | РВ | PB | 74% of B-NHLs, 24% of T, 2% of NK |
| 34. | M/64 | MCL | Ν | S | ingLN | 94% of B-NHLs, 0.5% of B, 5.5% of T |
| 35. | M/21 | BL | Ν | FNAB | axLN | 90% of B-NHLs, 3% of B, 6% of T, 1% of NK |
| 36. | M/54 | BL | N | FNAB | cLN | 65% of B-NHLs, 2% of B, 23% of T, 6% of NK, 4% of M |
| 37. | M/65 | EMZL | Е | FNAB | breastT | 80% of B-NHLs, 18% of T, 2% of NK |

Supplementary Table 1. Clinicopathological patients data of samples analysed by the optical tweezers. Abbreviation: F= female; M= male; UK=unknown; DLBCL, NOS= diffuse large B-cell lymphoma, not otherwise specified; GCB= germinal centre B-cell type; non-GCB= non-germinal centre B-cell type; FL= follicular lymphoma; HGBL= high grade B-cell lymphoma; MCL= mantle cell lymphoma; BL= Burkitt lymphoma; PCDLBCL= primary cutaneous diffuse large B-cell lymphoma; EMZL= extranodal marginal zone lymphoma; E= extranodal; N= nodal; FNAB= fine needle aspiration biopsy; S= surgically removed material; LN= lymph node; T= tumour; c= cervical; ax= axillary; ab= abdominal; ing= inguinal; st= soft tissue; PB= peripheral blood; FCM= flow cytometry analysis; B-NHLs= B-cell non-Hodgkin lymphoma cells; NK= natural killer lymphocytes; B= normal B-lymphocytes; T= normal T-lymphocytes; M= macrophages; D= debris.

| No. | Sex/Age | Diagnosis | Material | Site of involvement/ Source of |
|-----|---------|--------------------------|----------|--------------------------------|
| | | | | surgical or FNAB specimen |
| 1. | F/82 | Cholecystitis acute | S | common bile duct area |
| 2. | F/76 | Cholecystitis acute | S | common bile duct area |
| 3. | F/65 | Cholecystitis acute | S | common bile duct area |
| 4. | F/80 | Cholecystitis acute | S | common bile duct area |
| 5. | M/65 | Chronic colitis | S | abLN |
| 6. | F/45 | Chronic colitis | S | abLN |
| 7. | M/29 | Reactive lymphadenopathy | FNAB | cLN |
| 8. | F/51 | Reactive lymphadenopathy | FNAB | femoral LN |
| 9. | F/58 | Reactive lymphadenopathy | FNAB | cLN |
| 10. | M/43 | Reactive lymphadenopathy | S | cLN |
| 11. | M/74 | Reactive lymphadenopathy | FNAB | ingLN |

| 12. | F/44 | Reactive lymphadenopathy | S | cLN |
|-----|------|--------------------------|------|------|
| 13. | F/72 | Reactive lymphadenopathy | S | axLN |
| 14. | M/89 | Reactive lymphadenopathy | FNAB | cLN |
| 15. | F/44 | Reactive lymphadenopathy | S | axLN |

Supplementary Table 2. Clinicopathological controls data of samples analysed by the optical tweezers. Abbreviation: F= female; M= male; S= surgically removed material; FNAB= fine needle aspiration biopsy; LN= lymph node; c= cervical; ax= axillary; ab= abdominal; ing= inguinal.