**Supplementary materials for the manuscript**

**Supplementary Table 1:** The age distribution of different paraprotein band types in males.

|  |  |
| --- | --- |
| **MALE** | **AGE (YEARS)** |
| **TYPE** | **20-29** | **30-39** | **40-49** | **50-59** | **60-69** | **70-79** | **80-89** | **90-99** |
| Free λ Monoclonal |   | 1 |   |   | 4 | 2 | 2 |   |
| Free κ Monoclonal |   |   | 1 | 1 | 1 | 2 |   |   |
| lgG-λ Monoclonal |   |   |   | 1 | 3 | 4 | 1 | 1 |
| lgG-κ Monoclonal |   | 1 |   | 3 | 6 | 3 | 1 |   |
| lgA-λ Monoclonal |   |   | 1 | 1 | 2 | 1 | 1 |   |
| lgA-κ Monoclonal |   |   |   |   | 4 | 2 |   |   |
| lgM-λ Monoclonal |   |   |   | 2 |   | 1 |   |   |
| lgM-κ Monoclonal |   |   |   |   | 1 | 1 |   |   |
| Biclonal Bands |   | 1 |   | 2 | 3 | 2 |   |   |
| Triclonal Bands |   |   |   |   |   |   |   |   |
| **TOTAL** | **0** | **3** | **2** | **10** | **24** | **18** | **5** | **1** |

**Supplementary Table 2:** The age distribution of different paraprotein band types in females.

|  |  |
| --- | --- |
| **FEMALE** | **AGE (YEARS)** |
| **TYPE** | **20-29** | **30-39** | **40-49** | **50-59** | **60-69** | **70-79** | **80-89** | **90-99** |
| Free λ Monoclonal | 1 | 2 | 1 | 3 | 1 | 3 |   |   |
| Free κ Monoclonal |   |   |   |   | 2 | 1 |   |   |
| lgG-λ Monoclonal |   |   | 2 | 2 | 4 | 2 | 1 |   |
| lgG-κ Monoclonal |   |   |   | 2 | 5 | 3 |   |   |
| lgA-λ Monoclonal |   |   |   |   |   | 3 |   |   |
| lgA-κ Monoclonal |   |   |   |   | 2 | 2 | 1 |   |
| lgM-λ Monoclonal |   |   |   |   |   |   |   |   |
| lgM-κ Monoclonal |   |   |   | 1 |   |   |   |   |
| Biclonal Bands |   |   |   |   | 2 | 2 | 2 |   |
| Triclonal Bands |   |   | 1 |   | 1 | 1 |   |   |
| **TOTAL** | **1** | **2** | **4** | **8** | **17** | **17** | **4** | **0** |

**Supplementary Table 3:** Clinical diagnoses and IFE results for all patients.

|  |  |  |
| --- | --- | --- |
| **DIAGNOSIS** | **IFENEGATIVE** | **IFEPOSITIVE** |
| Anemia | 118  | 13  |
| Abnormal Results ofKidney Function Studies | 45 | 8 |
| Enlarged Lymph Nodes | 27 | 2 |
| General MedicalExamination | 91 | 7 |
| Chronic Renal Failure | 34 | 4 |
| Leukocyte Disorders | 100 | 15 |
| Multiple Myeloma | 4 | 7 |
| Splenomegaly | 33 | 3 |
| Thrombocytopenia | 77 | 7 |
| Vitamin D Deficiency | 323 | 15  |
| Other | 265 | 33 |
| **TOTAL** | 1117  | 114  |

**Supplementary Table 4:** IFE status of all patients, categorized by their admitting clinical departments.

|  |  |  |
| --- | --- | --- |
| **CLINICS** | **IFENEGATIVE** | **IFEPOSITIVE** |
| Hematology | 491 | 64 |
| Internal Medicine | 141 | 18 |
| Nephrology | 109 | 15 |
| Neurology | 333 | 9 |
| Other | 43 | 10 |
| **TOTAL** | **1117** | **116** |

**Supplementary Table 5:** Kappa-lambda (κ/λ) ratio status (normal/abnormal) for patients stratified by their IFE positivity.

|  |  |  |  |
| --- | --- | --- | --- |
| **IFE STATUS** | **Normal κ/λ Ratio** | **Abnormalκ/λ Ratio** | **TOTALκ/λ Ratio** |
| **Positive** | 58 | 29 | 87 |
| **Negative** | 566 | 30 | 596 |

**Supplementary Table 6:** Serum kappa FLC status (normal/abnormal) for patients stratified by the presence or absence of kappa M-protein.

|  |  |  |
| --- | --- | --- |
| **Serum KappaFLC Results** | **Patients WithKappa M-Protein** | **Patients WithoutKappa M-Protein** |
| **Abnormal** | 16 | 27 |
| **Normal** | 16 | 569 |
| **TOTAL** | 32 | 596 |

**Supplementary Table 7:** Serum lambda FLC status (normal/abnormal) for patients stratified by the presence or absence of lambda M-protein.

|  |  |  |
| --- | --- | --- |
| **Serum LambdaFLC Results** | **Patients WithLambda M-Protein** | **Patients WithoutLambda M-Protein** |
| **Abnormal** | 13 | 3 |
| **Normal** | 32 | 593 |
| **TOTAL** | 45 | 596 |