

**Table 6S. Available biologic and clinical features of multi**

| Sequence code | IGHV gene   | IGHD gene   | IGHD reading frame | IGHJ gene | Identity to germline |
|---------------|-------------|-------------|--------------------|-----------|----------------------|
| T087GR        | IGHV3-48*03 | IGHD2-21*01 | 3                  | IGHJ4*02  | 100,0%               |
| T093AR        | IGHV3-64*02 | IGHD5-24*01 | 2                  | IGHJ6*02  | 98,6%                |
| T035DP        | IGHV3-21*01 | IGHD6-19*01 | 3                  | IGHJ5*02  | 98,9%                |
| X98901        | IGHV5-a*03  | IGHD3-10*01 | 2                  | IGHJ4*02  | 98,3%                |

**Abbreviations**

IGH, immunoglobulin heavy chain gene

IGHV, immunoglobulin heavy chain variable gene

IGHD, immunoglobulin heavy chain diversity gene

IGHJ, immunoglobulin heavy chain junction gene

HCDR3, complementarity determining region 3 on heavy chain gene

AA, aminoacid

IMGT, identified by ImMunoGeneTics V-QUEST tools (<http://imgt.cines.fr/>), see in text reference 2

Del 13q14, deletion of chromosome 13q14

ISS, international staging system

s-M, serum monoclonal

pBJ, Bence-Jones proteinuria

PC, plasma cells

s-b2M, serum beta 2 microglobulin

na, not available

## ple myleoma patients showing unmutated IGH

| HCDR3 AA sequence (IMGT) | HCDR3 lenght (AA) | Stereotyped | Del 13q14 |
|--------------------------|-------------------|-------------|-----------|
| CARGPPHRSRTHIVVVIAMRFDYW | 22                | No          | No        |
| CARFYYYYGMDVW            | 11                | No          | No        |
| CARENKHEWLVLNYNWFDPW     | 18                | Yes         | na        |
| CARHPTYDSDSGSYNFDW       | 17                | No          | na        |

| Age | Sex    | ISS stage | s-M protein | s-M protein g/dL | pBJ g/24 h | % PC |
|-----|--------|-----------|-------------|------------------|------------|------|
| 68  | female | 2         | IgA         | 2,23             | 0,1        | 35   |
| 42  | female | 2         | light chain | na               | 0          | 60   |
| na  | female | na        | na          | na               | na         | na   |
| na  | na     | na        | na          | na               | na         | na   |

| Albumin g/dL | s-β2M mg/L |
|--------------|------------|
| 4,8          | 3,6        |
| na           | 1,6        |
| na           | na         |
| na           | na         |

|   |
|---|
| <b>Notes</b>  |
| Complex karyotype: polisomy chromosome 9, monosomy chromosomes 8 and X  |
| Multiple myeloma with plasma cell leukemia  |
| Provisional cluster (N1) with a indolent mucosa-associated lymphoid tissue non-Hodgkin lymphoma: see Table 8S |
| Homo sapiens bone marrow from myeloma patient: Literature Series, see Table 1S                                |