**Supplementary Table 1.** sVEGF concentrations in non-POEMS neuropathy subgroups

|  |  |  |
| --- | --- | --- |
|  | **N patients (%)** | **sVEGF (pg/mL)** |
|  | **Mean +/- SD** | **Median [min;max]** |
| **Anti-MAG NP**  No vasculitis | 17 (8.3%) | 618 +/- 507 | 475 [59;1743] |
| Including 2 anti-MAG + vasculitic NP | 19 (9.2%) | 566 +/-503 | 370 [59;1743] |
| **Vasculitic NP** No Anti-MAG NP | 10 (4.9%) | 516 +/- 642 | 359 [54;2261] |
| Including 2 anti-MAG + vasculitic NP | 12 (5.8%) | 450 +/-601 | 309 [54;2261] |
| **Anti-MAG + Vasculitic NP** | **2 (1%)** | **123 +/- 55** | **- [84;162]** |
| **Other inflammatory and paraproteinaemic neuropathy** | **33 (16.0%)** | **309 +/-341** | **209 [34;1816]** |
| MMN | 5 (2.4%) | 235 +/- 148 | 190 [68;429] |
| GBS/AMAN | 7 (3.4%) | 230 +/-187 | 128 [57;522] |
| Inflammatory Axonal NP | 6 (2.9%) | 280 +/- 222 | 277 [46;635] |
| Other 1 | 15 (7.3%) | 4381 +/-464 | 267 [34;1816] |
| **Other non inflammatory NP** | **55 (26.7%)** | **261 +/- 278** | **153 [19;1469]** |
| Unknown cause/idiopathic | 26 (12.6%) | 279 +/-234 | 226 [34;1091] |
| Iatrogenic | 10 (4.9%) | 147 +/-160 | 82 [28;520] |
| Diabetic/B12 deficiency/Alcohol | 9 (4.4%) | 171 +/- 119 | 153 [48;447] |
| Hereditary NP | 6 (2.9%) | 420 +/-549 | 188 [53;1469] |
| Other 2 | 4 (1.9 %) | 397 +/-408 | 400 [19;768] |

***MMN:*** *multifocal motor neuropathy;* ***GBS/AMAN :*** *Guillain-Barré syndrome/acute motor axonal neuropathy ;* ***1:*** *paraproteinaemic neuropathy without anti-MAG Ab (n=3), inflammatory sensory ganglionopathy (n=2), paraneoplastic neuropathy (n=3), inflammatory neuropathy associated with non-Hodgkin’s lymphoma (n=2), inflammatory neuropathy associated with auto-immune connective tissue disorders (n=3), inflammatory small fiber neuropathy (n=1), AL amyloidosis (n=1) ;* ***2:*** *small fiber and/or autonomic neuropathy (n=3), critical care myoneuropathy (n=1)*

**Supplementary Table 2.** Patients with a neuropathy and a raised sVEGF.

|  |  |  |
| --- | --- | --- |
| **Case No** | **Diagnosis** | **sVEGF (pg/ml)** |
| **117** | Anti-MAG neuropathy, IgM MGUS, stable coronary arterial disease, mild asthma, persistent iron deficiency anaemia, stable Barrett's oesophagus | 789 |
| **55** | CIDP, glaucoma, hypertension. (sVEGF concentration tested 3 years before was 450 pg/ml) | 853 |
| **61** | Progressive probable sarcoidosis with central and peripheral nervous system involvement, treated with azathioprine | 915 |
| **176** | CIDP, type 2 diabetes, hypertension, peripheral arterial disease, anaemia with low serum iron (chronic inflammation pattern on iron profile) | 970 |
| **238** | Anti-MAG neuropathy, WM, 5 IgM kappa paraproteins, untreated OSAHS, recently healed fracture of humerus bone, hypertension, previous renal cell carcinoma in remission | 1043 |
| **48** | Anti-MAG neuropathy and indolent Waldenström’s macroglobulinaemia, hypothyroidism, benign pancreatic cystadenoma (sVEGF concentrations 2 and 7 months earlier were respectively 850 and 928 pg/ml) | 1058 |
| **100** | Inflammatory sensorimotor axonal neuropathy (no evidence of vasculitis) and myopathy, on-going investigations | 1091 |
| **268** | Anti-MAG neuropathy, IgM kappa MGUS, stable coronary artery disease, hypertension, migraine, previous renal cell carcinoma in remission | 1259 |
| **52** | Anti-MAG neuropathy, IgM kappa MGUS, treated epilepsy  | 1289 |
| **233** | Hereditary sensory neuropathy, IgG lambda MGUS, endometriosis, normochromic normocytic anaemia, uncomplicated pneumonia at the time of sampling  | 1469 |
| **142** | Anti-MAG neuropathy, MGUS, type 2 diabetes, organizing pneumonitis (treatment started after sVEGF testing, sVEGF concentration was 1177 pg/ml 3 months later) | 1743 |
| **114** | CIDP-like neuropathy associated with a low grade B-cell non-secreting non-Hodgkin’s lymphoma, persistent anaemia (iron status unknown). (sVEGF concentrations 1 month before and 3 months after were elevated at 1434 and 1614 pg/ml).  | 1816 |
| **44** | Vasculitic neuropathy, previous recurrent thromboembolic events (sVEGF was 281 pg/mL 6 months earlier) | 2261 |
| **145** | CIDP, type 2 diabetes, hypertension, folate deficiency, severe obstructive sleep apnea syndrome with pulmonary hypertension. (sVEGF concentrations tested 12 and 15 months later were 1480 and 2164 pg/ml) | 2443 |
| **81** | CIDP, iron deficiency anaemia , mild asthma. (sVEGF progressively decreased with iron supplementation down to 800 pg/ml) | 2616 |

**Supplementary Table 3.** Variables assessed for their predictive value in the multiple regression models

|  |  |
| --- | --- |
|  | N |
| Non-POEMS Neuropathy |  |
| CIDP | 51 |
| Anti-MAG neuropathy | 19 |
| Vasculitic neuropathy | 12 |
| Other inflammatory and paraproteinaemic neuropathy | 33 |
| Other non-inflammatory neuropathy | 55 |
| Haematological diseases |  |
| MGUS | 67 |
| Multiple myeloma | 42 |
| Waldenström Macroglobulinaemia | 17 |
| Non-Hodgkin’s Lymphoma | 4 |
| Other haematological malignancy | 9 |
| Hypertension | 59 |
| Endocrinopathy |  |
| Diabetes | 23 |
| Other endocrinopathy | 20 |
| Anaemia |  |
| Anaemia with normal serum iron | 32 |
| Anaemia with low serum iron | 6 |
| Other neurological diseases | 26 |
| Chronic inflammatory diseases | 23 |
| Benign tumors | 17 |
| Dyslipidaemia | 15 |
| Hypoxaemic diseases |  |
| Obstructive sleep apnoea-hypopnoea syndrome  | 7 |
| Chronic obstructive pulmonary disease | 7 |
| Ischaemic diseases | 13 |
| Non ischaemic heart diseases | 13 |
| Asthma | 11 |
| Solid cancers | 8 |
| Chronic kidney disease | 8 |
| Other  | 43 |

**Supplementary table 4.** Clinical features of patients with anaemia, low serum iron and raised sVEGF

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Case No** | **Diagnosis** | **Monoclonal paraprotein** | **Treatment** | **sVEGF (pg/ml)** |
| **54** | CIDP: weakness and sensory loss to hands and feet and facial weakness | -ve | Steroids, IVIG, rituximab | 970 |
| **119** | CIDP: sensory predominant to ankles and elbows | IgG Kappa | IVIG | 320 |
| **174** | Polymyositis, peripheral nerve vasculitis, myelodysplastic syndrome | IgA Kappa | Azathioprine, Mycophenolate Mofetil, Cyclophosphamide | 341 |
| **168** | Acute CIDP: recurrent episodes generalised weakness | -ve | Plasma exchange, IVIG, steroids | 2616 |
| **189** | Anti-MAG neuropathy: upper limb tremor, ankle weakness | IgM Kappa | Rituximab | 789 |