

8....., and to evaluate.....
9.....to follow-up their.....The patients were consulted

15....., responsible for.....

22.....didn't follow-up the progression

24 in some patients.....

26 levels, higher than 2.4 mg/l.....

28 levels were above 30 g/l.....

30.....consistent mainly with the more frequently observed
31 monoclonal gamma-globulin peak, but also with the assessed levels of IgG, which is known
32 as the most common isotype in plasma cell disorders. Our study showed also the usability of
33 electrophoresis and immuno-electrophoresis for detection of monoclonal gammopathies.....
34.....On the other hand, the increase in the levels of prognostic factors
35.....biological test for C-reactive protein.

46....., characterizing by.....

47....., and, sometimes, with tissue.....

49....., ranging from benign disorders.....

50.....to malignant pathologies, as, for instance, multiple

58.....karyotypic abnormalities, molecular

61....., and, therefore, designate the.....

75.....and rheumatology, etc.

82.....by taking in consideration.....

83....., as well as the type of immunoglobulin heavy and light chains.

84.....had followed-up the evolution.....

85....., such as erythrocyte.....

86..... β 2-microglobulin (β 2-m),.....

87.....patients' sera

92.....a risk

109.....showed a statistical significance of the results obtained (alpha=0.05).

112.....that the data about

119.....had a gamma-globulin.....

120.....beta-globulin zone.

121 The data from immuno-electrophoresis.....in the current study had a

124....., followed by 4 patients (13%)....., and 3 patients.....

135.....taken in consideration. According the data in table 2,

136.....didn't follow-up.....

142....., while the others.....

146....., and 55.56% - above 30 g/l, respectively

147.....However, the average level of

150.....of beta- or gamma-

151 globulin fractions, which were probably associated with light chain MG.

158 any risk to.....

159 In the current period, only five immunochemistry laboratories in Casablanca, performing
160 electrophoresis and immuno-electrophoresis, existed. Among them, figures Pesteur
161 Institute, covering, but also 20% from the population of

163....., many studies, performed in Morocco.....

164.....from those investigations.....

165....., in comparison with the data, which were reported.....

170....., especially in Iceland [11],....., with mean

171.....The observed differences, concerning.....

172....., may be due to.....

173....., which are different in the developed and undeveloped countries.....

176....., which requires.....

177....., it might be more cost effective.....

178 the life expectancy.....

179.....in our patients, which were above.....

180.....only two patients were on ages of 26 and 30 years, respectively.....

181....., carried out by....., who proved.....

182.....on mature age.....This confirmed some literature data...

183....., according which monoclonal gammopathies as.....

184 Similarly to the results of other studies, we.....

185.....the main difference between the cited and ours data was.....

189.....The established predominance of female individuals,.....

190 with the eventual influence of....., which was presented.....

192.....in the current study was IgG.....

193....., and the isotype of IgM (10%),

194 in the last place.....

195....., not in point of view the percentage, but the order. In the latter

196 inquiry, 63.6% of the patients were assessed with prevalence of IgG against 17.5% - of IgA,

198 in concordance with.....French studies performed.....

199.....[13], which revealed that isotypes

200.....in all the departments of

207.....Our **current** findings were in agreement with **previously reported** [8, 18, 20], outlining a
208.....**These**
209 observations could be explained **with** the fact.....
210.....**the** most frequently encountered.....

213....., discussed above.
214.....the association of **IgG** with.....
215....., indicating that the

221.....This **result** was compatible with.....

225.....[23], in which an increase of serum protein levels in
226 **63% of the cases with MM has been noticed**.....
227 **Indeed, the cases of MG, presented in the current investigation, indicated free light chains,**
228 **but also normal or low levels (hypoproteinemia) of serum proteins**.....

230....., compared with free.....

232....., which shows

235.....in a study, performed by van Hoeven et al. [21],

238 **An increase in β 2-micro-globulin levels in 33.33% of cases was also noted. In has already**
239 **been reported that this molecule is a small membrane protein, associated with**.....
240.....**prognostic factor,**
241 **correlating with**.....
242 **according to the results of Di Giovanni et al. [25],**.....
243 **the mean level of the same protein has been assessed to be significantly higher than**.....
244 **have been highly indicative for a neoplastic process**.....
245.....**According another study, levels of this**
246 **molecule, higher than 2.5 mg/l, have been associated with**.....

251 equal of 35 g/l or below this value. This finding is in support of previous.....

256 with the fact that....., which.....

257.....in beta- or gamma-globulin zone. This increase often leads to

262.....In contrary, normal or low

263 (hypoproteinemia) levels of proteins were.....beta- or gamma-globulin

264....., suffering of light chain MG, and presenting.....

265.....This result confirmed the reported by Charrafedine et al. finding [9],

266 according which most of the patients, diagnosed with light chain MG.....

267.....for detection

268 of PCDs.....

269....., which requires.....The current data

270 should be proven.....

272 In assessment of serum calcium levels,.....

273....., leading to an increased risk of.....

274.....Pagano et al. [27], who noted that.....

276.....one of the important factors.....

277.....patients with pre-malignant plasmatic

278 cell disorders.....

281.....in the current investigation that the patients with hyper-calcemia.....

283....., with exception of one patient, suffering of.....

284....., high concentrations of calcium, as well as high β 2-m and albumin serum

285 levels, could be considered as prognostic factors for PCDs.

289.....patients with

291.....criterion for this disease, which.....

292.....MM or WM, for which the anemia

294....., but they also had variable.....

297 according to our investigation, these two factors might not be.....

298.....non-IgM MG.....

299.....conditions, different from MG,.....

302 by an investigation, performed by Charafeddine et al. [9], carried out.....
303.....with 540 patients, in which low serum concentrations of

306.....after study the impact of.....

311.....In the current investigation, whatever.....

314 red blood cells.....Besides that, due to the small number of patients
315 followed-up, we can not judge whether or not ERS is a prognostic factor for PCDs.

324.....WM, characterized with.....

328 hyper-viscosity, which may.....

330.....Myeloma plasma^{tic} cells are negative on CD19, CD45, and CD27 expression,
331 but positive on....., in agreement with the report of
332.....[37]. In contrast to WM, MM is
333 similarly characterized by chromosome translocations, which include.....

337....., but they should not be

339.....requires the performance of bone marrow biopsy, for confirmation of diagnosis
340 with clinical investigations, radiological studies and.....

343.....several limitations:.....

350....., detected by.....