



**Figure S1** – Geographical distribution of the 333 participants integrating this study (A). The mean age of the participants with altered semen parameters (non-normozoospermic patients) was not significantly different from the participants with normal conventional semen parameters (normozoospermic patients) (B). Men with advanced paternal age (> 40 years old) presented significantly lower semen volume than men aged. b\* represent significant differences from 31 - 35 years (p-value < 0.05).