**Table 3. Results of genetic testing among the study patients according to the VT group.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **All VT groups** | **LBBB-VT** | **LBBB+RBBB-VT** | **RBBB-VT** | **P\*\*\*** |
| **No. of patients** | 954 | 882 | 30 | 42 |  |
| **Genetic test performed** | 538 (56.4) | 486 (55.1) | 22 (73.3) | 30 (71.4) | **0.018** |
| **No variant identified** | 121 (22.5) | 113 (23.3) | 5 (22.7) | 3 (10.0) |  |
| **"Familial unknown"** | 45 (8.4) | 44 (9.1) | 0 (0.0) | 1 (3.3) |  |
| **Variant identified** | 359 (66.7) | 325 (66.9) | 12 (54.5) | 22 (73.3) | 0.359 |
| **Plakophylin-2 (*PKP2)*** | 221 (61.6) | 212 (65.2) | 5 (41.7) | 4 (18.2) | **<0.001** |
| **Desmoglein-2 (*DSG2*)** | 26 (7.2) | 23 (7.1) | 1 (8.3) | 2 (9.1) | 1.000 |
| **Desmoplakin (*DSP*)** | 26 (7.2) | 15 (4.6) | 1 (8.3) | 10 (45.5) | **<0.001** |
| **Plakoglobin (*JUP*)** | 11 (3.1) | 10 (3.1) | 0 (0.0) | 1 (4.5) |  |
| **Desmocollin-2 (*DSC2*)** | 9 (2.5) | 8 (2.5) | 0 (0.0) | 1 (4.5) |  |
| **Multiple variants\*** | 9 (2.5) | 9 (2.8) | 0 (0.0) | 0 (0.0) |  |
| **Phospholamban (*PLN*)** | 18 (5.0) | 13 (4.0) | 3 (25.0) | 2 (9.1) | **0.047** |
| **Miscellaneous\*\*** | 39 (10.9) | 35 (10.8) | 2 (16.7) | 2 (9.1) | 1.000 |
| **Variant of unknown significance#** | 32 (5.9) | 26 (5.3) | 3 (13.6) | 3 (10.0) |  |
| **Unknown results** | 26 (4.8) | 22 (4.5) | 2 (9.1) | 2 (6.7) |  |

**\*** including 8 patients with PKP2 mutations (associated with another desmosomal mutation in 6)

\*\* includingTMEM43 (n=5); RYR2 (n=4); FLNC (n=2); TGFβ3 (n=1); MYH7 (n=1); KCNE1 (n=1); CTNNA3 (n=1); NKX2.5 (n=1)

\*\*\*Adjusted P-value for single gene comparisons

# Variant of unknown significance refers to the following desmosomal variants with their respective VT type:

*PKP2* (n=8): LBBB-VT (n=7); RBBB-VT (n=1)

*DSG2* (n=10): all in LBBB-VT patients

*DSP* (n=8): LBBB-VT (n=4); LBBB+RBBB-VT (n=3); RBBB-VT (n=1)

*JUP* (n=2): both in LBBB-VT patients

*DSC2* (n=4): LBBB-VT (n=3) and RBBB-VT (n=1)