fiting yet biologically most reasonable model to
describe the relationship between an outcome and a
set of explanatory variables. We have also calculated
odds ratio for each significant explanatory variable.

RESULTS

A total of 633 patients (449 female, 184 male)
with diffuse toxic goiter were included in our study.
Mean age of our patients was 38.2yr (range 14 -
75yrs). As for age, 488 patients were \( \leq 45 \) yrs at the
time of radioiodine ablation while the remaining 145
were \( > 45 \) yrs. According to 24h RAIU, there were
175 patients in the low uptake group and 458 in the
high uptake group. Four hundred fifty-five patients
(455) achieved cure with a single dose of \( ^{131}I \) and
the remaining 178 patients needed more than one dose.
Table 1 compares different patient variables between
the groups of patients successfully treated with the
first dose of radioiodine and the patients who had
persistent hyperthyroidism after the first dose of
radioiodine. Table 2 compares different variables
between the patients with high and low radioiodine
uptake. Thus, the overall first-dose success was 72%.
Success rate in females (449) was 73.9% and in males
(184) it was 66.8% (p-value = 0.07). The success rates
were comparable between the younger and older
patient groups (73.3% in \( \leq 45 \) yrs group and 66.9%
in the \( > 45 \) yrs group; p = 0.13). First-dose success
rate was 81.7% in the low uptake group and 68.1%
in the high uptake group, a difference which was
significant (p = 0.001).

For post-hoc univariate analysis considering the
influence of duration of disease, patients were divided
into two groups: group 1 with \( \leq 12 \) months duration
and group 2 with \( > 12 \) months duration of disease.
First-dose success rate in the two groups was 75.9%
and 68.3%, respectively (p = 0.03). In the assessment
of the effect of ATD, 505 patients had already taken

| Table 1. comparison of characteristics of patients with first dose success versus first dose failures |
|---------------------------------|------------------|------------------|------------------|
|                                | Success          | Failure          | P Values         |
| Age (yrs)                      | Mean             | 38               | 39               |
|                                | Median           | 38               | 38               |
|                                | Range            | 15-75            | 14-70            |
|                                | SD               | 9                | 10               |
| \( \leq 45 \) yrs               |                  | 73.3% 26.7%      |                  |
| \( > 45 \) yrs                 |                  | 66.9% 33.1%      |                  |
| Sex                            | Male             | 123 (66.8%)      | 61 (33.2%)       |
|                                | Female           | 332 (73.3%)      | 117 (26.1%)      |
|                                |                  | 0.07             |
| 24h RAIU %                     | Mean             | 60               | 65               |
|                                | SD               | 17               | 17               |
| \( \leq 12 \) months           |                  | 75.9% 24.1%      |                  |
| \( > 12 \) months              |                  | 68.3% 31.7%      |                  |
| Duration of disease (months)   | Mean             | 29               | 38               |
|                                | Median           | 18               | 24               |
|                                | SD               | 37               | 39               |
| ATD intake                     | +                | 352 (69.7%)      | 153 (30.3%)      |
|                                | -                | 103 (80.5%)      | 25 (19.5%)       |
| ATD intake                     | \( \leq 1 \) Yr   | 70.4%            | 29.6%            |
|                                | \( > 1 \) Yr     | 68.5%            | 31.5%            |
| Total                          |                  | 455 (71.9%)      | 178 (28.1%)      |