**Table S1.** Digestion-restrictied analysis.

| Author / Year | Aim | Sample Size | Key Findings |
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| Hoi et al. (1) / 1988 | Investigate the potential genetic basis for pituitary adenoma hormonal hypersecretion and autonomous growth | Two patients harboring a prolactinoma and an acromegalic adenoma | Hypomethylated GH gene in some human pituitary adenomas may be partially responsible for the hypersecretory state |
| Huttner et al. (2) / 1994 | GH gene hypomethylation in human pituitary somatotropinomas | 7 samples (5 PitNETs and 2 normal) | No alterations found in GH gene promotor region, but the gene appears to be hypomethylated |
| Woloschak et al. (3) / 1997 | Primary human pituitary adenomas for evidence of p16 gene methylation | Pituitary tumor specimens from 20 patients | Methylation of the CpG island of the p16 gene is the predominant mechanism of p16 gene inactivation in these tumors |
| Simpson et al. (4) / 2000 | Methylation status of the CpG island contained within the promoter region of the RB1 gene | Twelve sporadic, non-functional pituitary tumors (4 non-invasive and 8 invasive) and 18 somatotropinomas (11 noninvasive and 7 invasive) | A significant association between loss of pRb expression and methylation of the CpG island within the RB1 promoter region |
| Ruebel et al. (5) / 2001 | Analysis of a group of pituitary tumors for p16 gene methylation and protein expression | 24 frozen pituitary samples (21 PitNETs, 3 normal) | Analysis confirmed the high level of hypermethylation in null cell adenomas |
| Newell-Price et al. (6) / 2001 | Patterns of methylation of POMC in normal and neoplastic tissue | 6 samples. One ACTH PitNET and one NFPA. | POMC CpG island promoter is a powerful means of repressing expression |
| Picard et al. (7) / 2007 | Hypothesized that an imprinting dysregulation of Gsa transcript in somatotroph tumors | 11 pituitary adenoma samples | Partial methylation of exon 1A DMR and poor expression of exon 1A, inducing a higher expression of Gsa. |

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| | could impact tumoral phenotype | | |
| Raverot et al. (8) / 2010 | Aggressive PitNETs and pituitary carcinomas correlated with MGMT promoter methylation | Four with PRL-secreting tumors (three carcinomas and one aggressive tumor) and four with ACTH tumors (two carcinomas and two aggressive tumors) | MGMT status as a poor predictor of outcome for treatment with Temozolomide. |


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