

LIST OF TABLES

Tables	Page No.
Table 1: Estimated incidence, mortality and 5-year prevalence of top five cancer: both sexes	17
Table 2: Estimated Incidence, Mortality and 5-year prevalence of top five cancer: men	17
Table 3: Estimated Incidence, Mortality and 5-year prevalence of top five cancer: Women	18
Table 4: Number of Incident and Mortality cases and Mortality-Incidence Percent (M/I %)	19
Table 5: Major carcinogenic and genotoxic agents in pan masala and gutkha	24
Table 6: Tobacco associated carcinogens and genotoxic in human organ in which tobacco or tobacco smoke cause cancer	27
Table 7: Sequence of oligonucleotide primers and reaction conditions used for CYP1A1, CYP2E1, GSTP1, GSTM1 and GSTT1 genotyping	57
Table 8: Baseline characteristics of HNC cases and healthy control	59
Table 9: Distribution and comparison of CYP1A1, CYP2E1, GSTM1, GSTT1, GSTP1 genotypes in HNC cases and healthy control	60
Table 10: Distribution and comparison of CYP1A1, CYP2E1, GSTM1, GSTT1, GSTP1 genotypes in betel nut and non-betel nut chewing cases of HNC and healthy control	67
Table 11: Distribution and comparison of CYP1A1, CYP2E1, GSTM1, GSTT1, GSTP1 genotypes in tobacco and non- tobacco chewing cases of HNC and healthy control	68
Table 12: Distribution and comparison of CYP1A1, CYP2E1, GSTM1, GSTT1, GSTP1 genotypes in smoking and non- smoking cases of HNC and healthy control	69
Table 13: Distribution and comparison of CYP1A1, CYP2E1, GSTM1, GSTT1, GSTP1 genotypes in different combination of betel nut, tobacco chewing and smoking in HNC cases and healthy control	70
Table 14: Sequence of oligonucleotide primers and reaction conditions used for EPHX1, NAT1 and NAT2 genotyping	82

Table 15:	Distribution of EPHX113, EPHX139, NAT1, NAT2 genotypes in Cases of HNC and healthy control	85
Table 16:	Distribution of EPHX113, EPHX139, NAT1, NAT2 genotypes in betel nut and non-betel nut chewing cases of HNC and healthy control	86
Table 17:	Distribution of EPHX113, EPHX139, NAT1, NAT2 genotypes in Tobacco and non-tobacco chewing cases of HNC and healthy control	87
Table 18:	Distribution of EPHX113, EPHX139, NAT1, NAT2 genotypes in smoking and non-smoking chewing cases of HNC and healthy control	90
Table 19:	Distribution of EPHX113, EPHX139, NAT1, NAT2 genotypes in combined effect off betel nut- tobacco and betel nut –tobacco-smoking habits cases of HNC and healthy control	91
Table 20:	Interaction of EPHX1 genotypes with doses of betel nut habits for HNC risk factor	92
Table 21:	Interaction of NAT1 genotypes with doses of betel nut habits for HNC risk factor	93
Table 22:	Interaction of NAT2 genotypes with doses of betel nut habits for HNC risk factor	94
Table 23:	Sequence of oligonucleotide primers and reaction conditions used for ADH2, ADH3 and ALDH2 genotyping	110
Table 24:	Predictor for head and neck patient and healthy control	114
Table 25:	Distribution of polymorphisms and combined genotype of ADH2, ADH3 and ALDH2 genes in HNC patient and healthy control	115
Table 26:	Genotype distribution among HNC patients and healthy controls by alcohol and non- alcohol drinking	116
Table 27:	Distribution of ADH2, ADH3 and ALDH2 genotypes stratified with alcohol drinking status and HNC risk	118
Table 28:	Distribution of ADH2, ADH3 and ALDH2 genotypes stratified with betel nut, alcohol drinking status and HNC risk	119
Table 29:	Distribution of ADH2, ADH3 and ALDH2 genotypes stratified with betel nut, tobacco and alcohol drinking status and HNC risk	120
Table 30:	Sequence of oligonucleotide primers and reaction conditions used for XRCC1 Arg194Trp, XPD (ERCC2) exon 6, MGMT Trp65Cys,	133

	and MGMT 84 Leu84Phe	
Table 31:	Characteristic and duration of dietary habits in HNC cases and healthy control	135
Table 32:	Distribution of Polymorphism and combined genotype of DNA repair genes in HNC patient and healthy control	137
Table 33:	Distribution and frequency of DNA repair genotype and effect of betel nut, tobacco, smoking, alcohol consumption on the risk for HNC patient and healthy control	139
Table 34:	Interaction of DNA repair genotypes with doses of betel nut and tobacco HNC risk in betel nut- tobacco associated cases.	140
Table 35:	Interaction of DNA repair genotypes and doses of alcohol on the risk for HNC in betel nut – alcohol and betel nut- tobacco associated cases	141
Table 36:	HPV type-specific nested PCR Primer sequences	158
Table 37:	Demographic profile and association with hr- HPV Positivity- Hr- HPV detection and its association with demographic and clinico-pathological character	162
Table 38:	Relationship between clinico-pathological characteristics and hr- HPV Positivity	163
Table 39:	Relationship of betel nut, tobacco, smoking, and alcohol and status of hr-HPV in oral cavity cancer patients only	164
Table 40:	Relation of HPV-16 and HPV-18 with clinico-pathological characteristics	165