Appendix 1: Genes from literature review included in pathways analysis. A total of 97 unique genes were identified after accounting for duplicates and synonyms.

Gene Symbol	Gene Name	Source
ACTR3	ARP3 actin-related protein 3 homolog	Deroee AF, Oweinah J, Naraghi M, et al. Regression of polypoid nasal mucosa after systemic corticosteroid therapy: A proteomics study. Am J Rhinol 2009;23: 480-485.
ADRB2	adrenergic, beta-2-, receptor, surface	Bussu F, Tiziano FD, Giorgio A, et al. Argl6gly polymorphism of the beta2-adrenoceptor gene (ADRBeta2) as a susceptibility factor for nasal polyposis. Am J Rhinol 2007;21:378-82.
ALDH1A	aldehyde dehydrogenase 1 family, member A1	Deroee AF, Oweinah J, Naraghi M, et al. Regression of polypoid nasal mucosa after systemic corticosteroid therapy: A proteomics study. Am J Rhinol 2009;23: 480-485.
AMFR	autocrine motility factor receptor	Payne SC, Han JK, Huyett P, et al. Microarray analysis of distinct gene transcription profiles in non-eosinophilic chronic sinusitis with nasal polyps. Am J Rhinol 2008; 22:568–581.
AREG	amphiregulin	Li CW, Cheung W, Lin ZB, Lim JT, Wang DY. Oral steroids enhance repair in nasal polyposis via upregulation of the AP-1 gene network. Thorax 2009; 64:306-312.
AZGP1	alpha-2-glycoprotein 1, zinc-binding	Stankovic KM, Goldsztein H, Reh DD, Platt MP, Metson R. Gene Expression Profiling of Nasal Polyps Associated With Chronic Sinusitis and Aspirin-Sensitive Asthma. Laryngoscope 2008;118:881–889.
Beta adaptin	Beta adaptin	Zander KA, Saavedra MT, West J, et al. Protein microarray analysis of nasal polyps from aspirin-sensitive and aspirin-tolerant patients with chronic rhinosinusitis. Am J Rhinol Allergy 2009; 23:268-72.
CAMP	cathelicidin antimicrobial peptide	Chen PH, Fang SY. The expression of human antimicrobial peptide LL-37 in the human nasal mucosa Am J Rhinol 2004; 18:381-5.
CCL5	chemokine (C-C motif) ligand 5	Bartels J, Maune S, Meyer JE, et al. Increased eotaxin-mRNA expression in non-atopic and atopic nasal polyps: comparison to RANTES and MCP-3 expression. Rhinology 1997; 35:171-4.
CCL11	chemokine (C-C motif) ligand 11	
CCL24	chemokine (C-C motif) ligand 24	Schaefer D, Meyer JE, Pods R. Endothelial and epithelial expression of eotaxin-2 (CCL24) in nasal polyps. Int Arch Allergy Immunol 2006; 140:205-14.
CCR2	chemokine (C-C motif) receptor 2	Bolger WE, Joshi AS, Spear S, Nelson M, Govindaraj K. Gene expression analysis in sinonasal polyposis before and after oral corticosteroids: A preliminary investigation. Otolaryngol Head Neck Surg 2007;137: 27-33.
CCR5	chemokine (C-C motif) receptor 5	
CTSB	cathepsin B	Orlandi RR, Thibeault SL, Ferguson BJ. Microarray analysis of allergic fungal sinusitis and eosinophilic mucin rhinosinusitis. Otolaryngol Head Neck Surg 2007;136, 707-713.
CX3CL1	chemokine (C-X3-C motif) ligand 1	Bolger WE, Joshi AS, Spear S, Nelson M, Govindaraj K. Gene expression analysis in sinonasal polyposis before and after oral corticosteroids: A preliminary investigation. Otolaryngol Head Neck Surg 2007;137: 27-33.
CXCL1	chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)	Payne SC, Han JK, Huyett P, et al. Microarray analysis of distinct gene transcription profiles in non-eosinophilic chronic sinusitis with nasal polyps. Am J Rhinol 2008; 22:568–581.
CYSLTR1	cysteinyl leukotriene receptor 1	Perez-Novo CA, Claeys C, Van Cauwenberge P, Bachert C. Expression of eicosanoid receptors subtypes and eosinophilic inflammation: implication on chronic rhinosinusitis. Respir Res 2006; 7:75.
CYSLTR2	cysteinyl leukotriene receptor 2	
DMBT1	deleted in malignant brain tumors 1	Liu Z, Kim J, Sypek JP, et al. Gene expression profiles in human nasal polyp tissues studied by means of DNA microarray. J Allergy Clin Immunol 2004;114:783-90. Al Badaai Y, DiFalco MR, Tewfik MA, Samaha M. Quantitative proteomics of nasal mucus in chronic sinusitis with nasal polyposis.J Otolaryngol Head Neck Surg 2009;38:381-9. Kim TH, Lee SH, Lee HM, et al. Increased expression of glycoprotein 340 in the ethmoid sinus mucosa of patients with chronic sinusitis. Arch Otolaryngol Head Neck Surg 2007;133:1111-1114.
EGFR	epidermal growth factor receptor	Ding GQ, Zheng CQ, Bagga SS. Up-regulation of the mucosal epidermal growth factor receptor gene in chronic rhinosinusitis and nasal polyposis. Arch Otolaryngol Head Neck Surg 2007;133:1097-1103.
EGR1	early growth response 1	Li CW, Cheung W, Lin ZB, Lim JT, Wang DY. Oral steroids enhance repair in nasal polyposis via upregulation of the AP-1 gene network. Thorax 2009; 64:306-312.
EIF2S1	eukaryotic translation initiation factor 2, subunit 1 alpha, 35kDa	Deroee AF, Oweinah J, Naraghi M, et al. Regression of polypoid nasal mucosa after systemic corticosteroid therapy: A proteomics study. Am J Rhinol 2009;23: 480-485.
FGF7	fibroblast growth factor 7 (keratinocyte growth	Ishibashi T, Tanaka T, Nibu K, Ishimoto S, Kaga K. Keratinocyte growth factor and its receptor messenger RNA expression in nasal mucosa and nasal polyps. Ann Otol Rhinol Laryngol 1998; 107:885-90.

	factor)	
FOXP3	forkhead box P3	Van Bruaene N, Perez-Novo CA, Basinski TM, et al. T-cell regulation in chronic paranasal sinus disease. J Allergy Clin Immunol 2008;121:1435-41.
GATA3	GATA binding protein 3	
GM2A	GM2 ganglioside activator	Orlandi RR, Thibeault SL, Ferguson BJ. Microarray analysis of allergic fungal sinusitis and eosinophilic mucin rhinosinusitis. Otolaryngol Head Neck Surg 2007;136, 707-713.
GPR44	G protein-coupled receptor 44	Yamamoto M. Okano M, Fujiwara T, et al. Expression and characterization of PGD2 receptors in chronic rhinosinusitis: modulation of DP and CRTH2 by PGD2. Int Arch Allergy Immunol 2009; 148:127-36.
HBEGF	heparin-binding EGF-like growth factor	Li CW, Cheung W, Lin ZB, Lim JT, Wang DY. Oral steroids enhance repair in nasal polyposis via upregulation of the AP-1 gene network. Thorax 2009; 64:306-312.
HGF	hepatocyte growth factor (hepapoietin A; scatter factor)	Rho HS, Lee SH, Lee HM. Overexpression of hepatocyte growth factor and its receptor c-Met in nasal polyps. Arch Otolaryngol Head Neck Surg 2006;132:985-989.
HIF1A	hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)	Payne SC, Han JK, Huyett P, et al. Microarray analysis of distinct gene transcription profiles in non-eosinophilic chronic sinusitis with nasal polyps. Am J Rhinol 2008; 22:568–581.
HLA-DQB1	major histocompatibility complex, class II, DQ beta 1	Schubert MS, Hutcheson PS, Graff RJ, Santiago L, Slavin RG. HLA-DQB1*03 in allergic fungal sinusitis and other chronic hypertrophic rhinosinusitis. J Allergy Clin Immunol 2004;114:1376-83.
HPSE	heparanase	Kim TH, Lee HM, Lee SH, et al. Up-regulation of heparanase in the ethmoid sinus mucosa of patients with chronic sinusitis. Am J Rhinol Allergy 2009; 23:130-4.
HSPA5	heat shock 70kDa protein 5 (glucose-regulated protein, 78kDa)	Deroee AF, Oweinah J, Naraghi M, et al. Regression of polypoid nasal mucosa after systemic corticosteroid therapy: A proteomics study. Am J Rhinol 2009;23: 480-485.
HSPA1A	heat shock 70kDa protein 1A	Zander KA, Saavedra MT, West J, et al. Protein microarray analysis of nasal polyps from aspirin-sensitive and aspirin-tolerant patients with chronic rhinosinusitis. Am J Rhinol Allergy 2009; 23:268-72.
IDO1	indoleamine 2,3-dioxygenase 1	Sekigawa T, Tajjima A, Hasegawa T, et al. Gene-expression profiles in human nasal polyp tissues and identification of genetic susceptibility in aspirin-intolerant asthma. Clin Exp Allergy 2009;39:972-81.
IGKC	immunoglobulin kappa constant	Deroee AF, Oweinah J, Naraghi M, et al. Regression of polypoid nasal mucosa after systemic corticosteroid therapy: A proteomics study. Am J Rhinol 2009;23: 480-485.
IGLV4-3	immunoglobulin lambda variable 4-3	Al Badaai Y, DiFalco MR, Tewfik MA, Samaha M. Quantitative proteomics of nasal mucus in chronic sinusitis with nasal polyposis.J Otolaryngol Head Neck Surg 2009;38:381-9.
IL5	interleukin 5 (colony-stimulating factor, eosinophil)	Figueiredo CR, Santos RP, Silva I, Weckx L. Microarray cDNA to identify inflammatory genes in nasal polyposis. Am J Rhinol 2007; 21:231–235. Van Bruaene N, Perez-Novo CA, Basinski TM, et al. T-cell regulation in chronic paranasal sinus disease. J Allergy Clin Immunol 2008;121:1435-41. [12]Chen YS, Langhammer T, Westhofen M, Lorenzen J. Relationship between matrix metalloproteinases MMP-2, MMP-9, tissue inhibitor of matrix metalloproteinases-1 and IL-5, IL-8 in nasal polyps. Allergy 2007: 62: 66–72. Chen YS, Arab SF, Westhofen M, Lorenzen J. Expression of interleukin-5, interleukin-8, and interleukin-10 mRNA in the osteomeatal complex in nasal polyposis. Am J Rhinol 2005; 19:117-23.
IL6	interleukin 6 (interferon, beta 2)	Anand VK, Kacker A, Orjuela AF, et al. Inflammatory pathway gene expression in chronic rhinosinusitis. Am J Rhinol 2006; 20:471-6. Payne SC, Han JK, Huyett P, et al. Microarray analysis of distinct gene transcription profiles in non-eosinophilic chronic sinusitis with nasal polyps. Am J Rhinol 2008; 22:568–581. Li CW, Cheung W, Lin ZB, Lim JT, Wang DY. Oral steroids enhance repair in nasal polyposis via upregulation of the AP-1 gene network. Thorax 2009; 64:306-312.
IL8	interleukin 8	Payne SC, Han JK, Huyett P, et al. Microarray analysis of distinct gene transcription profiles in non-eosinophilic chronic sinusitis with nasal polyps. Am J Rhinol 2008; 22:568–581. Liu B, Wu J, Fan J, Peng Y. Gene expression profiles in human nasal polyps studies by DNA microarray. Lin Chung Er Bi Yan Hou Tou Jing Wai Ke Za Zhi. 2008;22(11):495-7.
IL13	interleukin 13	Anand VK, Kacker A, Orjuela AF, et al. Inflammatory pathway gene expression in chronic rhinosinusitis. Am J Rhinol 2006; 20:471-6. Van Bruaene N, Perez-Novo CA, Basinski TM, et al. T-cell regulation in chronic paranasal sinus disease. J Allergy Clin Immunol 2008;121:1435-41.
IL16	interleukin 16 (lymphocyte chemoattractant factor)	Lackner A, Raggam RB, Stammberger H, et al. The role of interleukin-16 in eosinophilic chronic rhinosinusitis. Eur Arch Otorhinolaryngol 2007; 264:887-93.
IL12 (complex)	interleukin 12	Anand VK, Kacker A, Orjuela AF, et al. Inflammatory pathway gene expression in chronic rhinosinusitis. Am J Rhinol 2006; 20:471-6.
IL17A	interleukin 17A	Wang X, Dong Z, Zhu DD, Guan B. Expression profile of immune-associated genes in nasal polyps. Ann Otol Rhinol Laryngol 2006;115:450-6.
IL17RA	interleukin 17	

	receptor A	
IL1R2	interleukin 1 receptor, type II	Sekigawa T, Tajjima A, Hasegawa T, et al. Gene-expression profiles in human nasal polyp tissues and identification of genetic susceptibility in aspirin-intolerant asthma. Clin Exp Allergy 2009;39:972-81.
IL1RL1	Interleukin 1 receptor -like 1	Castano R, Bosse Y, Endam LM, Desrosiers M. Evidence of association of interleukin-1 receptor-like 1 gene polymorphisms with chronic rhinosinusitis. Am J Rhinol Allergy 2009;23:377-84.
IL1RN	interleukin 1 receptor antagonist	Cheng Y, Lin C, Chang W. Increased prevalence of interleukin-1 receptor antagonist gene polymorphism in patients with chronic rhinosinusitis. Arch Otolaryngol Head Neck Surg 2006;132:285-290.
IL22RA1	interleukin 22 receptor, alpha 1	Ramanathan M, Spannhake EW, Lane AP. Chronic rhinosinusitis with nasal polyps is associated with decreased expression of mucosal interleukin 22 receptor. Laryngoscope 2007; 117:1839–1843. Endam LM, Bosse Y, Filali-Mouhim A, et al. Polymorphisms in the interleukin-22 receptor alpha-1 gene are associated with severe chronic rhinosinusitis. Otolaryngol Head Neck Surg 2009; 140:741-7.
IQGAP1	IQ motif containing GTPase activating protein 1	Deroee AF, Oweinah J, Naraghi M, et al. Regression of polypoid nasal mucosa after systemic corticosteroid therapy: A proteomics study. Am J Rhinol 2009;23: 480-485.
JUN	jun oncogene	Li CW, Cheung W, Lin ZB, Lim JT, Wang DY. Oral steroids enhance repair in nasal polyposis via upregulation of the AP-1 gene network. Thorax 2009; 64:306-312.
LCN1	lipocalin 1 (tear prealbumin)	Al Badaai Y, DiFalco MR, Tewfik MA, Samaha M. Quantitative proteomics of nasal mucus in chronic sinusitis with nasal polyposis.J Otolaryngol Head Neck Surg 2009;38:381-9.
LTB4R	leukotriene B4 receptor	Bolger WE, Joshi AS, Spear S, Nelson M, Govindaraj K. Gene expression analysis in sinonasal polyposis before and after oral corticosteroids: A preliminary investigation. Otolaryngol Head Neck Surg 2007;137: 27-33.
LTC4S	leukotriene C4 synthase	de Alarcon A, Steinke JW, Caughey R, et al. Expression of leukotriene C4 synthase and plasminogen activator inhibitor 1 gene promoter polymorphisms in sinusitis Am J Rhinol 2006; 20:545-9.
LTF	lactotransferrin	Liu Z, Kim J, Sypek JP, et al. Gene expression profiles in human nasal polyp tissues studied by means of DNA microarray. J Allergy Clin Immunol 2004;114:783-90.
LYZ	lysozyme	Tewfik MA, Latterich M, DiFalco MR, Samaha M. Proteomics of nasal mucus in chronic rhinosinusitis. Am J Rhinol 2007; 21:680-5, Al Badaai Y, DiFalco MR, Tewfik MA, Samaha M. Quantitative proteomics of nasal mucus in chronic sinusitis with nasal polyposis.J Otolaryngol Head Neck Surg 2009;38:381-9.
MCPT1	mast cell protease 1	Payne SC, Han JK, Huyett P, et al. Microarray analysis of distinct gene transcription profiles in non-eosinophilic chronic sinusitis with nasal polyps. Am J Rhinol 2008; 22:568–581.
MET	met proto-oncogene (hepatocyte growth factor receptor)	Stankovic KM, Goldsztein H, Reh DD, Platt MP, Metson R. Gene Expression Profiling of Nasal Polyps Associated With Chronic Sinusitis and Aspirin-Sensitive Asthma. Laryngoscope 2008;118:881–889. Castano R, Bosse Y, Endam LM, Filali-Mouhim A, Desrosiers M. c-MET pathway involvement in chronic rhinosinusitis: a genetic association analysis. Otolaryngol Head Neck Surg 2010; 142:665-71. Rho HS, Lee SH, Lee HM. Overexpression of hepatocyte growth factor and its receptor c-Met in nasal polyps. Arch Otolaryngol Head Neck Surg 2006;132:985-989.
MMP9	matrix metallopeptidase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)	Chen YS, Langhammer T, Westhofen M, Lorenzen J. Relationship between matrix metalloproteinases MMP-2, MMP-9, tissue inhibitor of matrix metalloproteinases-1 and IL-5, IL-8 in nasal polyps. Allergy 2007: 62: 66–72.
MUC8	mucin 8	Kim SS, Kim KS, Lee JG, et al. Levels of intracellular protein and messenger RNA of mucin and lysozyme in normal human nasal and polyp epithelium. Laryngoscope 2000; 110:276-80.
P4HB	prolyl 4-hydroxylase, beta polypeptide	Deroee AF, Oweinah J, Naraghi M, et al. Regression of polypoid nasal mucosa after systemic corticosteroid therapy: A proteomics study. Am J Rhinol 2009;23: 480-485.
PARK7	Parkinson disease (autosomal recessive, early onset) 7	
PIP	prolactin-induced protein	Stankovic KM, Goldsztein H, Reh DD, Platt MP, Metson R. Gene Expression Profiling of Nasal Polyps Associated With Chronic Sinusitis and Aspirin-Sensitive Asthma. Laryngoscope 2008;118:881–889. Liu Z, Kim J, Sypek JP, et al. Gene expression profiles in human nasal polyp tissues studied by means of DNA microarray. J Allergy Clin Immunol 2004;114:783-90.
POSTN	periostin, osteoblast specific factor	Stankovic KM, Goldsztein H, Reh DD, Platt MP, Metson R. Gene Expression Profiling of Nasal Polyps Associated With Chronic Sinusitis and Aspirin-Sensitive Asthma. Laryngoscope 2008;118:881–889.
PPP1R9B	protein phosphatase 1, regulatory (inhibitor) subunit 9B	
PTGDR	prostaglandin D2 receptor (DP)	Yamamoto M. Okano M, Fujiwara T, et al. Expression and characterization of PGD2 receptors in chronic rhinosinusitis: modulation of DP and CRTH2 by PGD2. Int Arch Allergy Immunol 2009; 148:127-36.
PTGDS	prostaglandin D2 synthase 21kDa (brain)	Okano M, Fujiwara T, Yammamoto M, et al. Role of prostaglandin D2 and E2 terminal synthases in chronic rhinosinusitis. Clin Exp Allergy 2006; 36:1028-38.
PTGER1	prostaglandin E receptor 1 (subtype	Perez-Novo CA, Watelet JB, Claeys C, Van Cauwenberge P, Bachert C. Prostaglandin, leukotriene, and lipoxin balance in chronic rhinosinusitis with and without nasal polyposis. J Allergy Clin Immunol

	EP1), 42kDa	2005;115:1189-96.
PTGER2	prostaglandin E receptor 2 (subtype EP2), 53kDa	
PTGER3	prostaglandin E receptor 3 (subtype EP3)	
PTGER4	prostaglandin E receptor 4 (subtype EP4)	
PTGES	prostaglandin E synthase	Okano M, Fujiwara T, Yammamoto M, et al. Role of prostaglandin D2 and E2 terminal synthases in chronic rhinosinusitis. Clin Exp Allergy 2006; 36:1028-38.
PTGES2	prostaglandin E synthase 2	Perez-Novo CA, Watelet JB, Claeys C, Van Cauwenberge P, Bachert C. Prostaglandin, leukotriene, and lipoxin balance in chronic rhinosinusitis with and without nasal polyposis. J Allergy Clin Immunol 2005;115:1189-96.
PTGS2	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	
RGS1	regulator of G-protein signaling 1	Liu B, Wu J, Fan J, Peng Y. Gene expression profiles in human nasal polyps studies by DNA microarray. Lin Chung Er Bi Yan Hou Tou Jing Wai Ke Za Zhi. 2008;22(11):495-7.
S100	S100	Orlandi RR, Thibeault SL, Ferguson BJ. Microarray analysis of allergic fungal sinusitis and eosinophilic mucin rhinosinusitis. Otolaryngol Head Neck Surg 2007;136, 707-713. Al Badaai Y, DiFalco MR, Tewfik MA, Samaha M. Quantitative proteomics of nasal mucus in chronic sinusitis with nasal polyposis.J Otolaryngol Head Neck Surg 2009;38:381-9.
S100A7	S100 calcium binding protein A7	Richer SL, Truong-Tran AQ, Conley DB, et al. Epithelial genes in chronic rhinosinusitis with and without nasal polyps. Am J Rhinol 2008; 22:228-34.
S100A8	S100 calcium binding protein A8	
SCGB1A1	secretoglobin, family 1A, member 1 (uteroglobin)	Benson M, Carlsson L, Adner M, e al. Gene profiling reveals increased expression of uteroglobin and other anti-inflammatory genes in glucocorticoid-treated nasal polyps. J Allergy Clin Immunol 2004;113:1137-43. Liu Z, Kim J, Sypek JP, et al. Gene expression profiles in human nasal polyp tissues studied by means of DNA microarray. J Allergy Clin Immunol 2004;114:783-90. Tewfik MA, Latterich M, DiFalco MR, Samaha M. Proteomics of nasal mucus in chronic rhinosinusitis. Am J Rhinol 2007; 21:680-5. Liu Z, Lu X, Zhang XH, et al. Clara cell 10-kDa protein expression in chronic rhinosinusitis and its cytokine-driven regulation in sinonasal mucosa. Allergy 2009; 64:149-57.
SCGB2A2	secretoglobin, family 2A, member 2	Fritz SB, Terrell JE, Conner ER, Kukowska-Latallo JF, Baker JR. Nasal mucosal gene expression in patients with allergic rhinitis with and without nasal polyps. J Allergy Clin Immunol 2003;112:1057-63.
SERPINA1	Serine pepditadse inhibitor a1	Kilty SJ, Bosse Y, Cormier C, Endam LM, Desrosiers MY. Polymorphisms in the SERPINA1 (Alpha-1-Antitrypsin) gene are associated with severe chronic rhinosinusitis unresponsive to medical therapy. Am J Rhinol Allergy 2010; 24:e4-9.
SERPINB4	serpin peptidase inhibitor, clade B (ovalbumin), member 4	Deroee AF, Oweinah J, Naraghi M, et al. Regression of polypoid nasal mucosa after systemic corticosteroid therapy: A proteomics study. Am J Rhinol 2009;23: 480-485
SFTPA1	surfactant protein A1	Woodworth BA, Wood R, Baatz JE, Schlosser RJ. Sinonasal surfactant protein A1, A2, and D gene expression in cystic fibrosis: a preliminary report. Otolaryngol Head Neck Surg 2007; 137:34
SFTPD	surfactant protein D	
SLPI	secretory leukocyte peptidase inhibitor	Tewfik MA, Latterich M, DiFalco MR, Samaha M. Proteomics of nasal mucus in chronic rhinosinusitis. Am J Rhinol 2007; 21:680-5.
SPINK5	serine peptidase inhibitor, Kazal type 5	Richer SL, Truong-Tran AQ, Conley DB, et al. Epithelial genes in chronic rhinosinusitis with and without nasal polyps. Am J Rhinol 2008; 22:228-34.
ST6GAL1	ST6 beta-galactosamide alpha-2,6-sialyltranferase 1	Orlandi RR, Thibeault SL, Ferguson BJ. Microarray analysis of allergic fungal sinusitis and eosinophilic mucin rhinosinusitis. Otolaryngol Head Neck Surg 2007;136, 707-713.
TBX21	T-box 21	Van Bruaene N, Perez-Novo CA, Basinski TM, et al. T-cell regulation in chronic paranasal sinus disease. J Allergy Clin Immunol 2008;121:1435-41
TCP1	t-complex 1	Deroee AF, Oweinah J, Naraghi M, et al. Regression of polypoid nasal mucosa after systemic corticosteroid therapy: A proteomics study. Am J Rhinol 2009;23: 480-485.
TGFB1	transforming growth factor, beta 1	Figueiredo CR, Santos RP, Silva I, Weckx L. Microarray cDNA to identify inflammatory genes in nasal polyposis. Am J Rhinol 2007; 21:231–235. Kim SS, Kim KS, Lee JG, et al. Levels of intracellular protein and messenger RNA of mucin and lysozyme in normal human nasal and polyp epithelium. Laryngoscope 2000; 110:276-80.

		Van Bruaene N, Perez-Novo CA, Basinski TM, et al. T-cell regulation in chronic paranasal sinus disease. J Allergy Clin Immunol 2008;121:1435-41.
TLR9	toll-like receptor 9	Ramanathan M, Lee WK, Dubin MG, et al. Sinonasal epithelial cell expression of toll-like receptor 9 is decreased in chronic rhinosinusitis with polyps. Am J Rhinol 2007; 21:110-6.
TNC	tenascin C	Payne SC, Han JK, Huyett P, et al. Microarray analysis of distinct gene transcription profiles in non-eosinophilic chronic sinusitis with nasal polyps. Am J Rhinol 2008; 22:568–581.
TNF	tumor necrosis factor	Anand VK, Kacker A, Orjuela AF, et al. Inflammatory pathway gene expression in chronic rhinosinusitis. Am J Rhinol 2006; 20:471-6. Bernstein JM, Anon JB, Rontal M, et al. Genetic polymorphisms in chronic hyperplastic sinusitis with nasal polyposis. Laryngoscope 2009;119:1258-64. Endam LM, Cormier C, Bosse Y, Filali-Mouhim A, Desrosiers M. Association of IL1A, IL1B, and TNF Gene Polymorphisms With Chronic Rhinosinusitis With and Without Nasal Polyposis. Arch Otolaryngol Head Neck Surg 2010;136(2):187-192.
TNFRSF1B	tumor necrosis factor receptor superfamily, member 1B	Rostkowska-Nadolska B, Kapral M, Mazurek U, et al. Quantification of the mRNA encoding Tumor Necrosis Factor alpha (TNFalpha) and its receptors in human nasal polyps. Adv Med Sci 2008; 53:263-9.
TNFSF13B	tumor necrosis factor (ligand) superfamily, member 13b	Kato A, Peters A, Suh L, et al. Evidence of a role for B cell–activating factor of the TNF family in the pathogenesis of chronic rhinosinusitis with nasal polyps. J Allergy Clin Immunol 2008;121:1385-92.
TP73	Tumor protein 73	Tournas A, Mfuna L, Bosse Y, et al. A pooling-based genome-wide association study implicates the p73 gene in chronic rhinosinusitis. J Otolaryngol Head Neck Surg 2010;39:188-95.
TSC22D3	TSC22 domain family, member 3	Zhang XH, Lu X, Long XB, et al. Chronic rhinosinusitis with and without nasal polyps is associated with decreased expression of glucocorticoid-induced leucine zipper. Clin Exp Allergy 2009; 39:647-54.

Appendix 2: Genes identified in Ingenuity Pathways Analysis from the highest scoring networks and the central nodal molecules in the top networks.

Gene Symbol	Gene Name
ADAM8	ADAM metallopeptidase domaine 8
ADAMTS	ADAM metallopeptidase with thrombosponin type 1, motif 9
AKT	protein kinase AKT
AP-1	Activator protein 1
BCL2A1	BCL-2 related protein A1
C/ebp	Cebp
C3AR1	complement component 3a receptor 1
Cbp	Cebp
CCL11	chemokine (c-c motif) ligand 11
CCL24	chemokine (C-C motif) ligand 24
CCL25	chemokine (c-c motif) ligand 25
CCR2	chemokine (c-c motif) receptor 2
CD180	CD180
Cebp	Cebp
CGREF1	cell growth regulator with EF hand domain 1
CHL1	cell adhesion molecule with homology to L1CAM
CORO1A	coronin 1A
CREB	cAMP responsive element binding protein 1
CRISP3	cysteine-rich secretory protein 3
CRLF2	cytokine receptor-like factor 2
CST1	Cystatin SN
CST7	Cystatin F
CTSC	Cathepsin C
DMBT	deleted in malignant brain tumors
DMBT1	deleted in malignant brain tumors 1
EGFR	Epithelial growth factor receptor
ELF5	E74-like factor 5
EMR1	EGF 1 module containing mucin-like hormone receptor-like 1
Eotaxin	eotaxin
ERK1/2	mitogen-activated protein kinase 1/3
ETS	ETS1/2
Fcer1	Fc epsilon
FCER2	Fc fragment of IgE

Fcgr2	CD32
Ferritin	Ferritin
FOXP3	forkhead box P3
G protein	G protein
GM2A	GM 2 ganglioside activator
GPR109B	G-protein coupled receptor 109B
histone h3	histone h3
HMGA2	high mobility group AT-group 2
HRH1	histamine receptor H1
IFN-alpha	interferon alpha
IFNG	interferon gamma
IgA	Immunoglobin A
IgG	immunoglobin G
IgG1	Immunoglobin G1
IGKC	immunoglobin kappa constant
IL10	interleukin 10
IL12	interleukin 12
IL16	Interleukin 16
IL23	Interleukin 23
IL6	Interleukin 6
JNK	mitogen-activated protein kinase 8
LTB4R	leukotriene B4 receptor
NfkB-RelA	nuclear factor kappa B
NOS2	nitric oxide synthase 2
P38MAPk	mitogen-activated protein kinase 14
Peptidase	peptidase
PI3K	phosphoinositide-3-kinase
PKC	protein kinase c
Ptger	prostaglandin E receptor
PTGER1	prostaglandin E receptor 1
PTGER2	prostaglandin E receptor 2
RGS1	regulator of G-protein signalling 1
S100A7	s100 calciumbinding protein A7
SAMSN1	SAM domain
SCGB1A1	secretoglobin, family 1A
SELPLG	selectin P ligand
SERPINF1	serpin peptidase inhibitor, clade F, member 1
SOCS3	supressor of cytokine signaling 3
SSA	Amyloid A
ST6GAL1	ST6 beta-galactosamide alpha-2,6-sialotransferase 1
ST8S1A1	ST-8 alpha-n-acetyl neuraminide sialotransferase
TGFB1	transforming growth factor beta 1
TH1 Cytokine	cytokine class Th1
TNF	tumor necrosis factor
TSLP	thymic stromal lymphopoietin
VEGF	vascular endothelium growth factor