

Sorting through the Safety Data Haystack: Using Machine Learning to Identify Individual Case Safety Reports (ICSRs) in Social-Digital Media

Drug Safety

Shaun Comfort, Sujan Perera, Zoe Hudson, Darren Dorrell, Shawman Meireis, Meenakshi Nagarajan, Cartic Ramakrishnan and Jennifer Fine

Corresponding Author:

Shaun Comfort, MD

Genentech - A Member of the Roche Group

South San Francisco, CA 94080

comforts@gene.com

Electronic Supplementary Material 1 Table of keywords used in search for social digital media posts containing potential ICSRs.

Roche Brands	Roche Products	Medical and Biological terms
454 Life Sciences	Accu-Chek;;;;;454 Sequencing GS junior	454 Sequencing GS junior;;
Ariosa	Accutane;;;;;accuchek	Ärzte ohne grenzen;;
Ariosa Diagnostics	Roaccutan*;;;;Accu-Chek	ABP 215
Bina Technologies	Accutrend;;;;Accutane	ABP 215;;
Biolmagene	ACE910;;;;	ABP 980
Capp Medical	Actemra;;;;Accutrend	ABP 980;;
Chugai	Activase;;;;Accutrend	ABP798
Foundation Medicine	Actonel;;;;Acid phosphatase	ABP798;;
Genentech	Alecensa;;;;Actemra	abstossungsreaktion*
Geneweave	Aleglitazar;;;;ACTH	abstossungsreaktion*;;
Glycart	AmpliChip;;;;Activase	access to medicine
InterMune	AmpliCor;;;;Actonel	access to medicine;;
Kapa Biosystems	anaprox;;;;AFB III	access to medicines
NimbleGen	anti-HCV Immunoassay;;;;AFP	access to medicines;;
Ventana	Atezolizumab;;;;Alcian Blue	accuchek;;
Roche	Avastin;;;;Alcian Yellow	Accutrend;;
Roche Group	Bactrim;;;;Alecensa	acne
F. Hoffmann-La Roche AG	Bloodhound;;;;Alecensis	acne;;
Roche Holding AG	Bondronat;;;;Alectinib	adh
F. Hoffmann-La Roche AG	Bonviva;;;;Aleglitazar	adiposita*
NOT: Tony Roche	Carvedilol;;;;Aleglitazar	adiposita*;;
NOT: Daniel Roche	CellCept;;;;ALK	Adipositas
NOT Tony Roche	Cellcounting;;;;Alkaline Phosphatase	Adipositas;;

Roche Brands	Roche Products	Medical and Biological terms
NOT Brian Roche	CETP inhibitor (R1658);;;;ALT/GPT	adrenalin insufficiencies
NOT Mr. Roche	CINtec;;;;Ammonia	advanced renal failure
NOT roche posay	CoaguChek;;;;Amphetamines	aids prevention
NOT roche brothers	Coasys;;;;AmpliChip	aids prevention;;
NOT daniel roche	Cobas;;;;AmpliChip	aids project
NOT Roche Football	cobimetinib;;;;AmpliCor	aids project;;
NOT La Roche Vendée Football	Combur-Test;;;;AmpliCor	aids projects
NOT La Roche VF	Copegus;;;;Amylase	aids projects;;
NOT Stephanie Roche	Cotellic;;;;anaprox	aids projekt
NOT Cullen Roche	Crenezumab;;;;Anti Muellerian Hormone	aids projekt;;
NOT Charlotte Roche	Cymevene;;;;Anti-CCP	aids projekte
NOT la roche team	Dalcetrapib;;;;Anti-HAV	aids projekte;;
NOT Dan Roche	Danoprevir;;;;Anti-HBc	AIDS-Test
NOT Daniel Roche	Dormicum;;;;Anti-HBe	AIDS-Test;;
NOT Casy Roche	Dual ISH test;;;;Anti-HBs	airway obstruction
NOT Travis Roche	ElecSYS;;;;Anti-HCV	Akne
NOT Christof Roche	emicizumab;;;;	akne*
NOT Nicolas Roche	emtansine;;;;anti-HCV Immunoassay	akne*;;
NOT Thorsten Roche	Epogin;;;;anti-HCV Immunoassay	Akne;;
NOT Otto Roche	Erivedge;;;;Anti-Tg	Alecensis;;
NOT Liza Roche	Esbriet;;;;Anti-TPO	Alectinib;;
NOT Marc Roche	Euglucon;;;;Anti-TSH-R	Aleglitazar;;
NOT Donald Roche	Fortovase;;;;Apolipoprotein A1	Alzheimer
NOT Brandon Roche	Fuzeon;;;;Apolipoprotein B	Alzheimer*
NOT Erick Roche	Ganciclovir;;;;ASLO	alzheimer*;;
NOT Dick Roche	Gantenerumab;;;;AST/GOT	Alzheimer;;
NOT Ella Roche	Gazyva;;;;AT III	amerikanische arzneimittelbehörde
NOT Henri-Pierre Roche	Obinutuzumab;;;;Atezolizumab	amerikanische arzneimittelbehörde;;
NOT Schriftsteller Roche	Gazyvaro;;;;Avastin	amerikanische gesundheitsbehörde
NOT Schriftstellerin Roche	GDC-0425;;;;Bactrim	amerikanische gesundheitsbehörde;;
Swisslab	GDC-0449;;;;Barbiturates	AmpliChip;;
Sysmex	GS FLX;;;;Basel cell cocktail	AmpliCor;;
	Herceptin;;;;bcl-2	Anaemia
	Invirase;;;;Bicarbonate (CO2)	Anaemia;;
	iScan;;;;Bilirubin	anemia

Roche Brands	Roche Products	Medical and Biological terms
	Kadcyla;;;;;blood screening	anti-ABeta-MAb
	Klonopin;;;;;Bloodhound	anti-ABeta-MAb;;
	Kytril;;;;;Bloodhound	antibioti*
	Lariam;;;;;Bondronat	antibioti*;;
	Lebrikizumab;;;;;Bonviva	antibiotic
	Lexotanil;;;;;BRAF	antibiotic;;
	Liat;;;;;C3c	Antibiotik*
	LightCycler;;;;;CA	Antibiotik*;;
	Lucentis;;;;;Ca2+	Antibody detection
	Mabthera;;;;;Calcitonin	Anticoagulation self monitoring
	Madopar;;;;;Calcium	anti-HCV Immunoassay;;
	Metmab;;;;;Cannabinoids	antikörp*
	Mircera;;;;;CARDIACreader	antikörp*;;
	MPDL3280A;;;;;Carvedilol	antiretroviral
	MPD-L3280;;;;;CD30	antiretroviral;;
	Multiplate;;;;;CEA	anxiety
	Neorecormon;;;;;CellCept	Applied Science
	Neupogen;;;;;Cellcounting	Applied Science;;
	Neutrogena;;;;;Cellcounting	arthritis
	Nimblegen;;;;;Ceruloplasmin	Ärzte ohne grenzen
	NT-proBNP;;;;;CETP inhibitor (R1658)	asphyxia
	Nutropin;;;;;Chagas4	Assays
	Ocrelizumab;;;;;Chloride	asthma
	Ocrevus;;;;;Cholinesterase Acetyl	atezolizumab;;
	Olesoxime;;;;;Cholinesterase Butyryl	atrial fibrillation
	Omalizumab;;;;;CINtec	Atypical Ductal Hyperplasia
	Pathway;;;;;CINtec	Aufsichtsbehörde*
	Pegasys;;;;;CK	Aufsichtsbehörde*;;
	Perjeta;;;;;CK-MB	auslaufend* Patent*
	Pertuzumab;;;;;CMV	auslaufend* Patent*;;
	Posicor;;;;;CMV IgG	autism
	Pulmozime;;;;;CoaguChek	autism*
	Raptiva;;;;;CoaguChek	autism*;;
	Reflotron;;;;;Coagu-Chek	autoimmun*
	Rituxan;;;;;Coasys	autoimmun*;;
	Roactemra;;;;;Coasys	autoimmune disease*
	rocaltrol;;;;;Cobas	Autoimmunkrankheit*
	Rocephin;;;;;Cobas	Autoimmunkrankheit*;;
	roferon;;;;;Cobas HPV	BACE inhibitor

Roche Brands	Roche Products	Medical and Biological terms
	Rohypnol;;;;;cobimetinib	BACE inhibitor;;
	Septifast;;;;;COHb	bakterielle Infektion*
	Symphony Test;;;;;Combur-Test	bakterielle Infektion*;;
	T-5224;;;;;Combur-Test	basal cell carcinoma
	T-DM1;;;;;Congo Red	BCD-022
	Tamiflu;;;;;Copegus	BCD-022;;
	TaqScreen;;;;;Cortisol	betablocker
	Tarceva;;;;;Cotellic	Betablocker*
	Tasmar;;;;;C-Peptide	Betablocker*;;
	Taspoglutide;;;;;Creatinine	betablocker;;
	Tecentriq;;;;;Crenezumab	BI 695500
	TG4001;;;;;CRP	BI 695500;;
	Tina-quant;;;;;CT NG	BI 695502
	TNKase;;;;;CTNG	BI 695502;;
	toradol;;;;;Cyfra 21-1	big pharma
	Troponin;;;;;Cymevene	big pharma;;
	Urisys;;;;;Cystatin C	Biogeneric
	Valcyte;;;;;Cytomegalovirus	Biogeneric;;
	Valganciclovir;;;;;Dalcetrapib	Biogenerico
	Valium;;;;;Danoprevir	Biogenerico;;
	Vantage;;;;;D-Dimer	Biogenerika
	venetoclax;;;;;DHEA-S	Biogenerika;;
	vesanoid;;;;;Diastase	Biogenerikum
	Viracept;;;;;Digitoxin	Biogenerikum;;
	Xcelligence;;;;;Digoxin	biogénérique
	Xeloda;;;;;Dormicum	biogénérique;;
	Xenical;;;;;Dual ISH test	biol*
	Xolair;;;;;Dual ISH test	biol*;;
	Zelboraf;;;;;EGFR	biologic copy
	Zenapax;;;;;Elastic staining kit	biologic copy;;
	Acid phosphatase;;;;;Elecsys	biologisch* Arznei*
	ACTH;;;;;Elecsys	biologisch* Arznei*;;
	AFB III;;;;;emtansine	Biopharma*
	AFP;;;;;Epogen	Biopharma*;;
	Alcian Blue;;;;;ER	Biopharmazeutika
	Alcian Yellow;;;;;ERG	Biopharmazeutika;;
	ALK;;;;;Erivedge	Biopharmazeutikum
	Alkaline Phosphatase;;;;;Erythrocytes (Hb)	Biopharmazeutikum;;
	ALT/GPT;;;;;Esbriet	Biopharmazeutische Innovationen

Roche Brands	Roche Products	Medical and Biological terms
	Ammonia;;;;Estradiol	Biopharmazeutische Innovationen;;
	Amphetamines;;;;Ethanol	biosimilaire
	Amylase;;;;Euglucon	biosimilaire;;
	Anti Muellerian Hormone;;;;Ferritin	Biosimilar
	Anti-CCP;;;;Folate	Biosimilar;;
	Anti-HAV;;;;Fortovase	Biotech*
	Anti-HBc;;;;Fructosamine	Biotech*;;
	Anti-HBe;;;;FSH	Bioterapeutico
	Anti-HBs;;;;FT3	Bioterapeutico;;
	Anti-HCV;;;;FT4	Biotherapeutic
	Anti-Tg;;;;Fuzeon	biotherapeutic copy
	Anti-TPO;;;;Gamma Glutamyl Transferase	biotherapeutic copy;;
	Anti-TSH-R;;;;Ganciclovir	Bioterapeutic;;
	Apolipoprotein A1;;;;Gantenerumab	Biotherapeutika
	Apolipoprotein B;;;;Gazyva	Biotherapeutika;;
	ASLO;;;;Gazyvaro	Biotherapeutikum
	AST/GOT;;;;GDC-0425	Biotherapeutikum;;
	AT III;;;;GDC-0425	bladder cancer
	Barbiturates;;;;GDC-0449	blockage of endotrachial tube
	Basel cell cocktail;;;;GDC-0449	Blood Gas and Electrolytes
	bcl-2;;;;GGT	Blood glucose monitoring
	Bicarbonate (CO2);;;;Giemsa	blood loss
	Bilirubin;;;;Glutamate Dehydrogenase	Blood sampling
	blood screening;;;;GMSIII	Blood sampling;;
	BRAF;;;;GOT (AST)	blood screening
	C-Peptide;;;;GPT (ALT)	blood screening;;
	C3c;;;;Gram staining kit	blood transfusion
	CA;;;;GS FLX	Blood-Bank
	Ca2+;;;;GS FLX	Blood-Bank;;
	Calcitonin;;;;H&E	Bloodhound;;
	Calcium;;;;Haptoglobin	Blue genes
	Cannabinoids;;;;Harmony test	Blue genes;;
	CD30;;;;HbA1c	Blutbank
	CEA;;;;HBeAg	Blutbank;;
	Ceruloplasmin;;;;HBsAG	Blutgerinnungsmessgeraet
	Chagas4;;;;HBV	Blutgerinnungsmessgeraet;;
	Chloride;;;;hCG	Blutgewinnung
	Cholinesterase Acetyl;;;;HCV	Blutgewinnung;;

Roche Brands	Roche Products	Medical and Biological terms
	Cholinesterase Butyryl;;;;HDL	Blutglukose
	CK;;;;HE4	Blutglukose;;
	CK-MB;;;;Hematocrit	Blutscreening
	CMV;;;;Hemoglobin total	Blutscreening;;
	CMV IgG;;;;HER-2	Bluttest
	COHb;;;;Herceptin	Bluttest;;
	Congo Red;;;;hGH	Blutzucker
	Cortisol;;;;HHb	Blutzucker MessgerÄxt;;
	Creatinine;;;;HIV	Blutzucker Messgerät
	CRP;;;;Homocysteine	Blutzucker;;
	CT NG;;;;HPV	bone
	CTNG;;;;HSV-1 IgG	bonemarkers
	Cyfra 21-1;;;;HSV-2 IgG	brain trauma
	Cystatin C;;;;HTLV.(II IV I 1 2 4)	breast cancer
	Cytomegalovirus;;;;Human papiloma virus	bronchitis
	D- Dimer;;;;Humanpapilomavirus	BSE
	DHEA-S;;;;Hydroxybutyrat Dehydrogenase	BSE;;
	Diastase;;;;†±1-Acid Glycoprotein	Bundesamt für Gesundheit
	Digitoxin;;;;†±1-Antitrypsin	Bundesamt für Gesundheit;;
	Digoxin;;;;†² 2-Microglobulin	cancer diagnostics
	EGFR;;;;†²-CrossLaps	cancer diagnostics;;
	Elastic staining kit;;;;IgA	cancer immunotherap*
	ER;;;;IgE	carbon monoxide poisoning
	ERG;;;;IgG	Cardiac
	Erythrocytes (Hb);;;;IgM	CARDIACreader;;
	Estradiol;;;;Immunglobulin	Cardiac testing
	Ethanol;;;;Interleukin 6	Cardiac-reader
	Ferritin;;;;Invirase	Cardiac-reader;;
	Folate;;;;Iron Binding Capacity - Unsaturated	Cellcounting;;
	Fructosamine;;;;iScan	Cell-free DNA
	FSH;;;;Jones	central nervous system
	FT3;;;;K+	central nervous system;;
	FT4;;;;Kadcyla	cervical cancer
	Gamma Glutamyl Transferase;;;;Kappa light chains	cfDNA
	GGT;;;;Ketone	checkpoint inhibitor

Roche Brands	Roche Products	Medical and Biological terms
	Giemsa;;;;Ki-67	chelators
	Glutamate Dehydrogenase;;;;Klonopin	Chemotherapie
	GMS III;;;;KRAS	Chemotherapie;;
	GOT (AST);;;;Kytril	chronic cardiac failure
	GPT (ALT);;;;Lactate	chronic hypermatremia
	Gram staining kit;;;;Lactate Dehydrogenase	Chronic progressing alveolar destruction
	H&E;;;;Lambda light chains	Chronic renal failure
	Haptoglobin;;;;Lariam	CINtec;;
	Harmony test;;;;LDL	Circle of care
	HbA1c;;;;Lebrikizumab	Circle of care;;
	HBeAg;;;;Leukocytes	Circulatory failure
	HBsAG;;;;Lexotanil	CLIA lab
	HBV;;;;LH	CLIA waiver
	hCG;;;;Liat	Clinical Chemistry
	HCV;;;;LightCycler	clinical trial*
	HDL;;;;LightCycler	clinical trial*;;
	HE4;;;;Lipase	CNS
	Hematocrit;;;;Lipids	CNS;;
	Hemoglobin total;;;;Lipoprotein (a)	COAD
	HER-2;;;;LSD	CoaguChek;;
	hGH;;;;Lucentis	Coagu-Chek;;
	HHb;;;;Mabthera	Coagulation
	HIV;;;;Madopar	Coagulation monitoring
	Homocysteine;;;;Magnesium	Coasys;;
	HPV;;;;Methadone	Cobas HPV;;
	HSV-1 IgG;;;;Methaqualone	Cobas;;
	HSV-2 IgG;;;;MetHb	cognitive disorders
	HTLV.(II IV I 1 2 4);;;Metmab	cognitive disorders;;
	Human papiloma virus;;;;Mircera	colitis
	Humanpapilomavirus;;;;MPD-L3280	Colorectal cancer
	Hydroxybutyrat Dehydrogenase;;;;MPDL3280A	Combur-Test;;
	IgA;;;;Mucicarmine	conference
	IgE;;;;Multiplate	conference;;
	IgG;;;;Multiplex	Congenital Heart defect
	IgM;;;;Myoglobin	Congestive heart failure
	Immunglobulin;;;;Na+	congress
	Interleukin 6;;;;Neorecormon	congress;;

Roche Brands	Roche Products	Medical and Biological terms
	Iron Binding Capacity - Unsaturated;;;;Neupogen	continuous monitoring
	Jones;;;;Neutrogin	continuous monitoring;;
	K+;;;;Nimblegen	COPD
	Kappa light chains;;;;Nitrite	copia de producto biologico;;
	Ketone;;;;N-MID Osteocalcin	copia de producto bioterapeutico
	Ki-67;;;;NSE	copia de producto bioterapeutico;;
	KRAS;;;;NT-proBNP	copie de médicament biologique;;
	Lactate;;;;NT-proBNP	copie de médicamentbiologique
	Lactate Dehydrogenase;;;;NT-proBNP	copie de produit biologique
	Lambda light chains;;;;Nutropin	copie de produit biologique;;
	LDL;;;;O2Hb	Corticosteroid excess
	Leukocytes;;;;Obinutuzumab	Crenezumab;;
	LH;;;;Ocrelizumab	crispr
	Lipase;;;;Ocrevus	critical care
	Lipids;;;;Olesoxime	Crohn's disease
	Lipoprotein (a);;;;Omalizumab	CT-P10
	LSD;;;;Opiates	CT-P10;;
	Magnesium;;;;Oxycodone	CT-P6
	Methadone;;;;Oxygen Saturation	CT-P6;;
	Methaqualone;;;;p16	Cytotoxic agent administration
	MetHb;;;;p18	DAT
	Mucicarmine;;;;P1NP	Decreased blood volume
	Multiplex;;;;PAP smear	Depression
	Myoglobin;;;;parvovirus	depression*
	N-MID Osteocalcin;;;;PAS	depression*;;
	Na+;;;;Pathway	Depression;;
	Nitrite;;;;PCO2	dermatitis
	NSE;;;;Pegasys	dermatolo*
	NT-proBNP;;;;Perjeta	dermatolo*;;
	O2Hb;;;;Pertuzumab	Dermatologie
	Opiates;;;;pH	Dermatologie;;
	Oxycodone;;;;Phencyclidine	Dermatology
	Oxygen Saturation;;;;Phosphorus	Dermatology;;
	p16;;;;PO2	Dermatopathology
	p18;;;;Posicor	diabet*
	P1NP;;;;Potassium	diabet*;;

Roche Brands	Roche Products	Medical and Biological terms
	PAP smear;;;;PR	Diabetes
	parvovirus;;;;Prealbumin	Diabetes mellitus
	PAS;;;;Procalcitonin	Diabetes;;
	PCO2;;;;Progesterone	Diagnos*
	pH;;;;proGRP	Diagnose
	Phencyclidine;;;;Prolactin	Diagnose;;
	Phosphorus;;;;Propoxyphene	Diagnosis
	PO2;;;;PSA free	diagnosis of pleural effusion
	Potassium;;;;PSA total	Diagnosis;;
	PR;;;;PT/Quick	Diagnostic
	Prealbumin;;;;PTH	Diagnostic;;
	Procalcitonin;;;;Pulmozime	DIAGNOSTICS
	Progesterone;;;;Raptiva	Diagnostics;;
	proGRP;;;;Reflotron	Diagnostik
	Prolactin;;;;Reflotron	Diagnostik;;
	Propoxyphene;;;;Reticulum II	Diagnostika
	PSA free;;;;Rheumatoid factor	Diagnostika;;
	PSA total;;;;Rituxan	Digital pathology
	PT/Quick;;;;Roaccutan*	DISH
	PTH;;;;Roactemra	Diuretic Issues
	Reticulum II;;;;rocaltrol	DNA
	Rheumatoid factor;;;;Rocephin	Dna Analyse
	Rubella;;;;roferon	Dna Analyse;;
	S-100;;;;Rohypnol	dna Chip
	SCC4;;;;Rubella	dna Chip;;
	sFlt-1/PIGF;;;;S-100	Dna Technologie
	SHBG;;;;SCC4	Dna Technologie;;
	SO2 COOX;;;;Septifast	DNA;;
	Sodium;;;;Septifast	Down Syndrome
	Soluble transferrin receptor;;;;sFlt-1/PIGF	down syndrome;;
	Specific gravity;;;;SHBG	Downs Syndrom
	Steiner;;;;SO2 COOX	dritte welt
	Steiner II;;;;Sodium	dritte welt;;
	T-uptake;;;;Soluble transferrin receptor	Drug alterations
	T3;;;;Specific gravity	Drug alterations - salicylate
	T4;;;;Steiner	drug approval
	Testosterone;;;;Steiner II	drug approval;;
	tHb-COOX;;;;Swisslab	drug benefit
	Thyreoglobulin;;;;Symphony Test	drug benefit;;

Roche Brands	Roche Products	Medical and Biological terms
	Total Protein;;;;;Sysmex	drug benefits
	Toxo;;;;;T3	drug benefits;;
	Toxoplasmosis;;;;;T4	drug discovery
	TPLA (Syphilis);;;;;T-5224	drug discovery;;
	Transferrin;;;;;Tamiflu	drug pipeline
	Trichrome;;;;;TaqScreen	drug pipeline;;
	Triglycerides;;;;;TaqScreen	drug target*
	Triglycerides Glycerol blanked;;;;;Tarceva	drug target*;;
	Troponin I;;;;;Tasmar	drugs
	Troponin T;;;;;Taspoglutide	drugs compan*
	TSH;;;;;T-DM1	drugs compan*;;
	TTF 1;;;;;Tecentriq	drugs industry
	Urea (BUN);;;;;Testosterone	drugs industry;;
	Uric Acide;;;;;TG4001	drugs;;
	Urobilinogen;;;;;tHb-COOX	Dual ISH test;;
	varicella-zoster;;;;;Thyreoglobulin	Dyslipidemia
	Viral load;;;;;Tina-quant	Einlizenzierung*
	Vitamin B12;;;;;Tina-quant	Einlizenzierung*;;
	Vitamin D;;;;;TNKase	eiweiss*
	Vitamin D total;;;;;toradol	eiweiss*;;
	Î±1-Acid Glycoprotein;;;;;Total Protein	Elecsys;;
	Î±1-Antitrypsin;;;;;Toxo	Embolii
	Î² 2-Microglobulin;;;;;Toxoplasmosis	EMEA
	Î²-CrossLaps;;;;;TPLA (Syphilis)	EMEA;;
	LightCycler;;;;;Transferrin	emergency room
	Cellcounting;;;;;Trichrome	Emphysema
	454 Sequencing GS junior;;;;;Triglycerides	Endocrinology
	GS FLX;;;;;Triglycerides Glycerol blanked	Endocrine disorders
	anti-HCV Immunoassay;;;;;Troponin I	english keywords"Healthcare
	accuchek;;;;;Troponin T	Entwicklungsländ*
	Dual ISH test;;;;;Troponin	Entwicklungsländ*;;
	GDC-0425;;;;;Troponin	entzündung*
	GDC-0449;;;;;TSH	entzündung*;;
	Aleglitazar;;;;;TTF 1	epidem*
	Accutrend;;;;;T-uptake	epidem*;;

Roche Brands	Roche Products	Medical and Biological terms
	AmpliChip;;;;Urea (BUN)	Europäische Arzneimittelagentur
	AmpliCor;;;;Uric Acide	Europäische Arzneimittel-agentur
	CoaguChek;;;;Urisys	Europäische Arzneimittelagentur;;
	Coasyss;;;;Urisys	Europäische Arzneimittel-agentur;;
	Cobas;;;;Urobilinogen	European Medicines Agency
	Cobas HPV;;;;Valcyte	European Medicines Agency;;
	Combur-Test;;;;Valganciclovir	Excess HCO3 administration
	Elecsys;;;;Valium	Excessive insulin
	NT-proBNP;;;;Vantage	expiring patent*
	Septifast;;;;varicella-zoster	expiring patent*;;
	TaqScreen;;;;venetoclax	F&E
	Troponin;;;;vesanoid	F&E;;
	CARDIACreader;;;;Viracept	FDA
	Bloodhound;;;;Viral load	FDA Approval
	CINtec;;;;Vitamin B12	FDA;;
	Coagu-Chek;;;;Vitamin D	Fertility
	Reflotron;;;;Vitamin D total	fettleibig*
	Swisslab;;;;Xcelligence	fettleibig*;;
	Sysmex;;;;Xeloda	fettleibigkeit
	Tina-quant;;;;Xenical	fettleibigkeit;;
	Urisys;;;;Xolair	fibrosis
	(Confirm Inform Modular Pathway Multiplate).{1	filng for approval
	Alecensis;;;;Zenapax	filng for approval;;
	Alectinib;;;;	FISH
		flu
		flu;;
		Follow-on biologic
		Follow-on biologic;;
		forsch*
		forsch*;;
		Forschung & Entwicklung
		Forschung & Entwicklung;;
		Forschungsabteilung
		Forschungsabteilung;;
		Forschungsaufwendung*
		Forschungsaufwendung*;;
		Forschungslabor
		Forschungslabor;;

Roche Brands	Roche Products	Medical and Biological terms
		fragile-X
		fragile-X;;
		GABA-A
		GABA-A;;
		GABA-Alpha-5-inverse agonist
		GABA-Alpha-5-inverse agonist;;
		GDC-0425;;
		GDC-0449;;
		gefäßserk*
		gefäßserk*;;
		Gefässerkrankung*
		Gefässerkrankung*;;
		gefäßskrank*
		gefäßskrank*;;
		genanaly*
		genanaly*;;
		Gene expressing research
		Gene expressing research;;
		generic cop*
		generic cop*;;
		generics
		generics;;
		Generika*
		Generika*;;
		Generikum*
		Generikum*;;
		genet*
		genet*;;
		genetic test
		genetic test;;
		genmaterial
		genmaterial;;
		Genome sequencer
		Genome sequencer;;
		Genomics
		genomics;;
		genotyping
		Gentechnisch
		Gentechnisch;;
		Gentest
		gentest*
		gentest*;;

Roche Brands	Roche Products	Medical and Biological terms
		Gentest;;
		gentherap*
		gentherap*;;
		gesundheit*
		gesundheit*;;
		Gesundheitsmarkt*
		Gesundheitsmarkt*;;
		Gesundheitswesen
		Gesundheitswesen;;
		GI absorptive issues
		glaucoma
		glioblastoma
		glucose meter
		glucose meter;;
		GP 2013
		GP 2013;;
		GP2013
		GP-2013
		GP2013;;
		GP-2013;;
		Grippe
		Grippe;;
		Grosslabor
		Grosslabor;;
		GS FLX;;
		H1N1
		H1N1;;
		H5N1
		H5N1;;
		HBV
		HBV;;
		HCV
		HCV;;
		Health care
		Health care;;
		HEALTHCARE
		health-care
		Healthcare keywords;;
		Healthcare;;
		health-care;;
		Heart attack
		Heart Failure

Roche Brands	Roche Products	Medical and Biological terms
		heilmittelgesetz
		heilmittelgesetz;;
		hematology
		hematology analyzer
		hematology analyzer;;
		Hematopathology
		Hemostasis
		Hepatic Cirrhosis
		Hepatitis
		Hepatitis C
		Hepatitis C;;
		Hepatitis;;
		Hepatology
		HER2 positive
		Hercules
		Hercules;;
		herzinsuffizien*
		herzinsuffizien*;;
		herzinsuffizienz
		herzinsuffizienz;;
		Herz-Kreislauf
		herzkreislauf*
		herzkreislauf*;;
		Herz-Kreislauf;;
		Histology
		HIV
		HIV;;
		HIV-Infektion
		HIV-Infektion;;
		hmg
		hmg;;
		hyperbiliruninemia
		Hypermagnesemia
		Hyperosmolality
		Hyperparathyroidism
		Hyperphosphatemia
		Hyperventilation by mechanical ventilator
		Hypodipsia
		Hypomagnesemia
		Hypoparathyroidism

Roche Brands	Roche Products	Medical and Biological terms
		Hypoventilation by mechanical ventilator
		Hypoxemia
		Immonhistochemistry
		immune oncology
		immunoassays
		immunoassays;;
		Immunochemistry
		immun-onkologie
		immuno-oncology
		immunotherap*
		immunsuppressiv*
		immunsuppressiv*;;
		immuntherap*
		Impaired fuction of respiratory center
		In situ hybridization
		In vitro diagnostics
		Inadequate cardiac output
		indication
		indication;;
		indikation
		indikation;;
		Infectious Diseases
		Infektionskrankheit*
		Infektionskrankheit*;;
		Inflammation
		inflammation*
		inflammation*;;
		influenza
		infusion system
		infusion system;;
		Infusionssystem
		Infusionssystem;;
		In-licensing
		In-licensing;;
		Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen
		Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen;;
		institut*

Roche Brands	Roche Products	Medical and Biological terms
		institut*;;
		institute
		Institute for Quality and Efficiency in Health Care
		Institute for Quality and Efficiency in Health Care;;
		institute;;
		insulin
		Insulin deficiency
		insulin;;
		Insulinoma
		Insulinpumpe
		Insulinpumpe;;
		integrated health care
		integrated health care;;
		integrated healthcare
		integrated healthcare;;
		integrierte Gesundheitslösung*
		integrierte Gesundheitslösung*;;
		Intended copy biologic
		Intended copy biologic;;
		intensive care
		internal bleeding
		Interpharma
		Interpharma;;
		In-vitro diagnostics
		In-vitro diagnostics;;
		IQWiG
		IQWiG;;
		ISH
		isoniazid
		isoniazid;;
		IVD
		kassenpflichtig*
		kassenpflichtig*;;
		Ketoacidosis
		Kidney (renal) function
		kidney cancer
		klinisch*
		klinisch* Studi*
		klinisch* Studi*;;

Roche Brands	Roche Products	Medical and Biological terms
		klinisch* Test*
		klinisch* Test*;;
		klinisch* Versuch*
		klinisch* Versuch*;;
		klinisch*;;
		Kombinationstherapie*
		Kombinationstherapie*;;
		kongress*
		kongress*;;
		Konsumentenschutz
		Konsumentenschutz;;
		krankenkas*
		krankenkas*;;
		krankenvers*
		krankenvers*;;
		Krankheiten des zentralen Nervensystems
		Krankheiten des zentralen Nervensystems;;
		Krankheitserkennung
		Krankheitserkennung;;
		krankheitversicherungsgesetz
		krankheitversicherungsgesetz;;
		Krebs
		Krebs;;
		Kreislaufinsuffizienz
		Kreislaufinsuffizienz;;
		kvg
		kvg;;
		labor*
		labor*;;
		Laboratory automation
		laboratory diagnostics
		laboratory diagnostics;;
		Lactate acidosis
		Lactate clearence
		langzeittherapie*
		langzeittherapie*;;
		Lanzette
		Lanzette;;
		Left ventricular failure
		Leukämie

Roche Brands	Roche Products	Medical and Biological terms
		Leukämie;;
		leukemia
		lightcycler
		LightCycler;;
		linear array
		Lipid testing
		Liquid biopsy
		Loss of bicarbonate
		Loss of hypertonic fluids
		lung cancer
		lupus
		MabionCD20
		MabionCD20;;
		macular degeneration
		Malignancy
		Managed laboratory services
		Managed services
		MAO-B inhibitor
		MAO-B inhibitor;;
		Markenmedikament*
		Markenmedikament*;;
		marker
		marker;;
		Markteinführung*
		Markteinführung*;;
		Massive hemolysis
		Mechanical heart valve
		medicaid
		medicaid;;
		medical
		medical;;
		médicament biologique non comparable;;
		médicament biologique;;
		médicament obtenus par biotechnologie;;
		médicamentbiologique
		médicamentbiologique non comparable
		médicamentobtenus par biotechnologie
		medicare
		medicare;;

Roche Brands	Roche Products	Medical and Biological terms
		medicine
		medicine*
		medicine*;;
		medicine;;
		Medicines and Healthcare products Regulatory Agency
		Medicines and Healthcare products Regulatory Agency;;
		medicins sans frontieres;;
		Medikament*
		Medikament*;;
		Medikamentenpreis*
		Medikamentenpreis*;;
		Medikamentenzulassung*
		Medikamentenzulassung*;;
		medizinische Formel
		medizinische Formel;;
		meilenstein
		Melanoma
		Metabolic
		Metabolic acidosis
		Metabolic Alkalosis
		Metabolic syndrome
		metabolism
		metabolism;;
		metasta*
		metasta*;;
		Metastase*
		Metastase*;;
		metastatic melanoma
		mGluR2 antagonist
		mGluR2 antagonist;;
		mGluR5 antagonist
		mGluR5 antagonist;;
		MHRA
		MHRA;;
		microarrays
		microarrays;;
		Microbiology
		milenstein;;
		milestone
		milestone;;

Roche Brands	Roche Products	Medical and Biological terms
		molecular diagnostics
		molecular diagnostics;;
		molecular entit*
		molecular entit*;;
		Molekulardiagnostik
		Molekulardiagnostik;;
		Monitoring
		Monitoring device
		Monotherapie*
		Monotherapie*;;
		multiple myeloma
		multiple sclerosis
		multiple sclerosis;;
		multiple sklerose
		multiple sklerose;;
		Myocardial Infarction
		Nachahmerprodukt*
		Nachahmerprodukt*;;
		Nachfolgeprodukt
		Nachfolgeprodukt;;
		Nachfolgerprodukt*
		Nachfolgerprodukt*;;
		National Institute for Health and Care Excellence
		National Institute for Health and Care Excellence;;
		NCB
		NCB;;
		near patient testing
		near patient testing;;
		Nebenwirkung*
		Nebenwirkung*;;
		neoteben
		neoteben;;
		nephrotic syndrome
		neue* Medikament*
		neue* Medikament*;;
		neurodegenerati*
		neurodegenerati*;;
		Neuromuscular disease
		new medicine*
		new medicine*;;

Roche Brands	Roche Products	Medical and Biological terms
		next generation sequencing
		NGOs
		NGOs;;
		NGS
		NICE
		NICE;;
		nichtstaatliche Organisationen
		nichtstaatliche Organisationen;;
		NimbleGen;;
		nipt
		non small cell lung cancer
		Non-comparable biotherapeutic product
		Non-comparable biotherapeutic product;;
		Non-Hodgkin-Lymphom
		Non-Hodgkin-Lymphom;;
		non-Hodgkin's lymphom*
		non-invasive prenatal test
		NT-proBNP;;
		nydrazid
		nydrazid;;
		obesit*
		obesit*;;
		obesity
		obesity;;
		Obstructive lung disease
		occult blood testing
		occult blood testing;;
		ocular hypertension
		Oncology
		Oncology;;
		onkolog*i*
		onkolog*i*;;
		Onkologie
		Onkologie;;
		open heart surgery
		organtransplantation*
		organtransplantation*;;
		Osteoporosis
		osteopor*
		osteopor*;;

Roche Brands	Roche Products	Medical and Biological terms
		osteoporose
		osteoporose;;
		ostheopor*
		ostheopor*;;
		OTC-Produkt*
		OTC-Produkt*;;
		ovarian cancer
		oxfam
		oxfam;;
		oxygen transport
		Panceatitis
		pancreatic cancer
		pandemi*
		pandemi*;;
		parallel import
		parallel import;;
		parallel imports
		parallel imports;;
		Parallelimport
		Parallelimport;;
		Parallelimporte
		Parallelimporte;;
		Parkinson*
		Parkinson*;;
		patent filing*
		patent filing*;;
		patent lawsuit*
		patent lawsuit*;;
		patent protection
		patent protection;;
		patent ruling*
		Patentablauf*
		Patentablauf*;;
		Patentantr*
		Patentantr*;;
		Patententscheid*
		Patententscheid*;;
		Patentschutz
		Patentschutz;;
		Patentstreit*
		Patentstreit*;;
		Pathology

Roche Brands	Roche Products	Medical and Biological terms
		Pathway;;
		patient
		patient advocacy group
		patient advocacy group;;
		patient advocacy groups
		patient advocacy groups;;
		patient organisation
		patient organisation;;
		patient organisations
		patient organisations;;
		patient;;
		Patienten*
		Patienten*;;
		Patientenorganisation*
		Patientenorganisation*;;
		patients
		patients;;
		PCR
		PCR;;
		peptid*
		peptid*;;
		personalisierte Medizin
		personalisierte Medizin;;
		PF-05280014
		PF-05280014;;
		PF-05280586
		PF-05280586;;
		PF-06439535
		PF-06439535;;
		PHARMA
		pharma access
		pharma access;;
		pharma compan*
		pharma compan*;;
		pharma giant
		pharma giant;;
		Pharma keywords;;
		pharma sector
		pharma sector;;
		Pharma*
		Pharma*;;
		pharmaaccess

Roche Brands	Roche Products	Medical and Biological terms
		pharmaaccess;;
		Pharmacogenomic
		Pharmacogenomic;;
		Pharmaverband
		Pharmaverband;;
		PhRMA
		PhRMA;;
		pipeline
		pipeline;;
		Plasmascreening
		Plasmascreening;;
		Plasmatest
		Plasmatest;;
		Point of Care
		Point testing
		Point testing;;
		Polydipsia
		polymerase chain reaction
		polymerase chain reaction;;
		Potassium depletion
		Prediction
		Predisposition
		Preeclampsia
		pregnancy care
		Preiskontrolle
		Preiskontrolle;;
		Preisreduktion
		Preisreduktion;;
		Preisregulierung
		Preisregulierung;;
		Preissenkung*
		Preissenkung*;;
		prescription drug costs
		prescription drug costs;;
		Prevention
		price control
		price control;;
		Primary Staining
		Producto bioterapeutico no comparable
		Producto bioterapeutico no comparable;;

Roche Brands	Roche Products	Medical and Biological terms
		produits biologiques non-comparables
		produits biologiques non-comparables;;
		produits biologiques successeurs
		produits biologiques successeurs;;
		Prostate cancer
		protein*
		protein*;;
		Proteomics
		Proteomics;;
		Psoriasis
		Psoriasis;;
		pulmonary disease
		Pulmonary embolisme
		Pulmonary fibrosis
		Pulmonary Oedema
		r&d
		r&d;;
		Reagents
		Recherche et développement
		Recherche et développement;;
		Referrence labs
		Reflotron;;
		reimbursement
		reimbursement;;
		Renal
		renal cell cancer
		Renal failure
		Renal tubular acidosis
		research
		Research & development
		Research & development;;
		research department*
		research department*;;
		research lab*
		research lab*;;
		research laborator*
		research laborator*;;
		research process
		research process;;

Roche Brands	Roche Products	Medical and Biological terms
		research;;
		Respiratory Acidosis
		Respiratory Alkalosis
		Respiratory depression
		rezeptfrei*
		rezeptfrei*;;
		rezeptpflichtig*
		rezeptpflichtig*;;
		RG7800
		RG7800;;
		rheumatoïd arthritis
		rheumatoïde arthritis
		rheumatoïde arthritis;;
		rimifon
		rimifon;;
		risk prediction
		risk prediction;;
		RNA
		RNA;;
		rückerstattung
		rückerstattung;;
		Rückruf eines Medikamentes
		Rückruf eines Medikamentes;;
		Rx-drugs
		Rx-drugs;;
		Salt-losing neuropathies
		santesuisse
		santesuisse;;
		SB3
		SB3;;
		schizophreni*
		schizophreni*;;
		schizophrenia*
		schizophrenia*;;
		Schizophrenie
		Schizophrenie;;
		SCIENCE
		Science keywords;;
		scientif*
		scientif*;;
		Screening
		Screening programs

Roche Brands	Roche Products	Medical and Biological terms
		Selbstdiagnose
		Selbstdiagnose;;
		Self monitoring
		Sepsis
		Septic shock
		Septicemia
		Septifast;;
		Serology
		Serum Work Area
		Severe hemorrhage
		Severe hyperlipidemia
		Shunt of venous blood to arterial system
		skin cancer
		SMA
		SMA;;
		spanish keywords" copia de producto biologico
		Special Stains
		Specimen workflow
		spinal muscular atrophy
		spinal muscular atrophy;;
		stammzell*
		stammzell*;;
		standardized blood test or diabetes
		Stechhilfe
		Stechhilfe;;
		stem cell*
		stem cell*;;
		stoffwechselkrank*
		stoffwechselkrank*;;
		stoffwechselkrankheit*
		stoffwechselkrankheit*;;
		Stratification
		Stress
		Stroke
		studie
		studie;;
		study
		study;;
		Swisslab;;

Roche Brands	Roche Products	Medical and Biological terms
		Swissmedic
		Swissmedic;;
		Syphilis
		Sysmex;;
		TaqScreen;;
		TDM
		therap*
		therap*;;
		Therapie*
		Therapie*;;
		Therapiegebiet*;;
		Therapy
		Therapy;;
		tierexperim*
		tierexperim*;;
		tierversuch*
		tierversuch*;;
		Tina-quant;;
		Tissue Diagnostics
		Tissue Diagnostics;;
		Tissue oxygenation
		Tissue perfusion
		TORCH
		Transplantationsmedizin
		transplantationsmedizin*
		transplantationsmedizin*;;
		Transplantationsmedizin;;
		TRIPS
		TRIPS;;
		Troponin;;
		tuber?ulos*
		tuber?ulos*;;
		tumor
		Tumor markers
		Tumor*
		Tumor*;;
		tumormarkers
		unaids
		unaids;;
		Urine
		Urisys;;
		urogenital*

Roche Brands	Roche Products	Medical and Biological terms
		urogenital*;;
		Urogenitalerkrankung*
		Urogenitalerkrankung*;;
		V1 receptor antagonist
		V1 receptor antagonist;;
		Value of diagnostics
		vasculitis
		Vasoconstriction
		Venous thromboembolism
		Venous tromboembolism
		virenstam*
		virenstam*;;
		Virenstamm
		Virenstamm;;
		virologi*
		virologi*;;
		Virologie
		Virologie;;
		virology
		virology;;
		Virus
		Virus;;
		Vitamin D defect
		Vitamin D deficiency
		Vogelgrippe
		Vogelgrippe;;
		Water balance
		West Nile Virus
		West Nile Virus;;
		WHO;;
		Wirkstoff*
		Wirkstoff*;;
		wissenschaft*
		wissenschaft*;;
		Women's Health
		Workflow consulting
		world trade organisation
		world trade organisation;;
		ZNS
		ZNS;;
		Zulassungsanmeldung*
		Zulassungsanmeldung*;;

Roche Brands	Roche Products	Medical and Biological terms
		Zulassungsbehörde*
		Zulassungsbehörde*;;
		Zulassungsverfahren*
		Zulassungsverfahren*;;
		"Thema Patente: englische Begriffe"patent ruling*;;
		genom
		genom;;
		grippe
		grippe;;
		hodgkin lymphom
		hodgkin lymphom;;
		infektion
		infektion;;
		krankheit
		krankheit;;
		krebs
		krebs;;
		nervensystem
		nervensystem;;
		therapie
		therapie;;
		tumor
		tumor;;
		wirkstoff
		wirkstoff;;