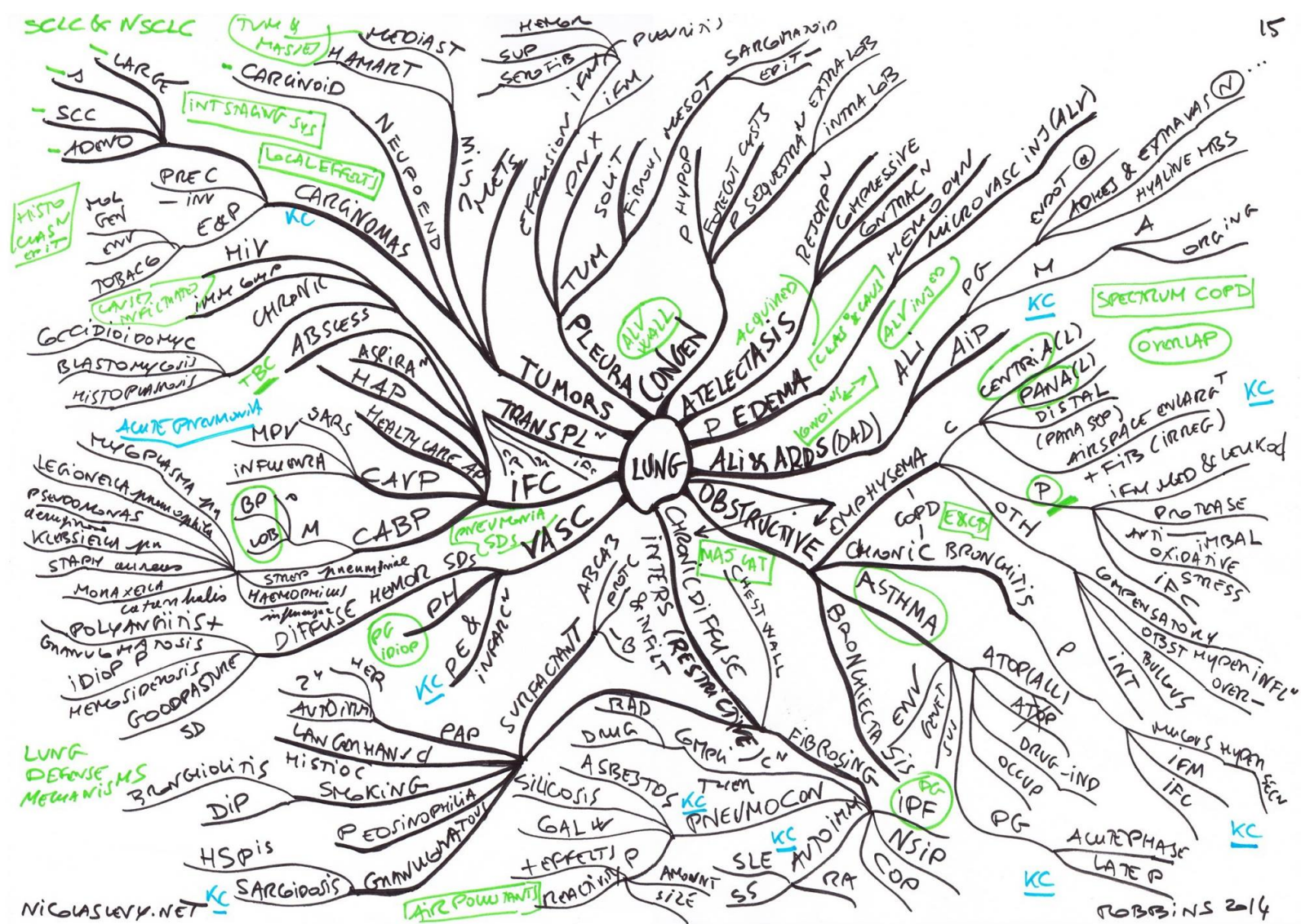
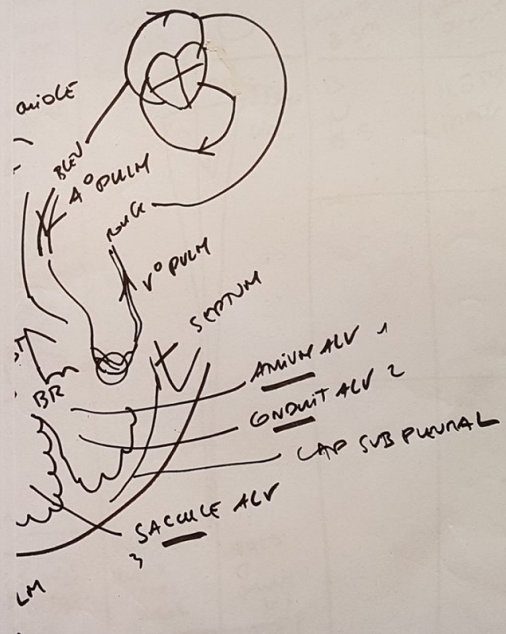






KAM

ROBBINS MINARUK
15 LUNG

ATA

$\text{CH}_3-\text{CH}_2-\text{COOH}$
SUC

ADP
NAD
PHOSPHATASE

METILC

OTOCYST

ADP

Y

Row

Row

Row

Row

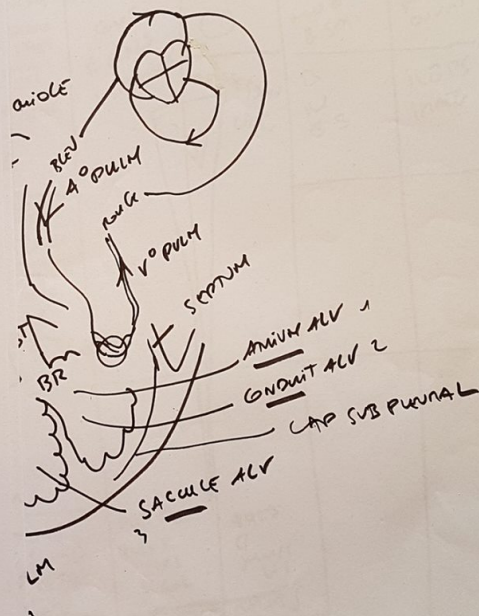
Row

Row

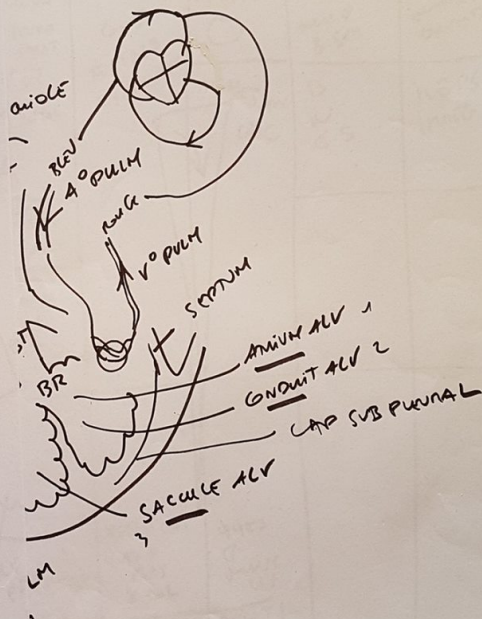
Row

Row

Row



KAM

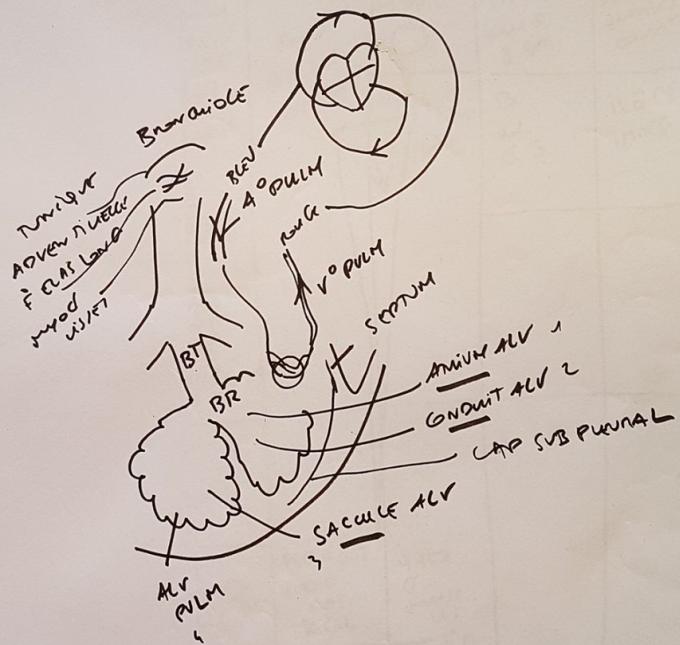


AL
A

KAMINA PUMONS

KAM

BAT

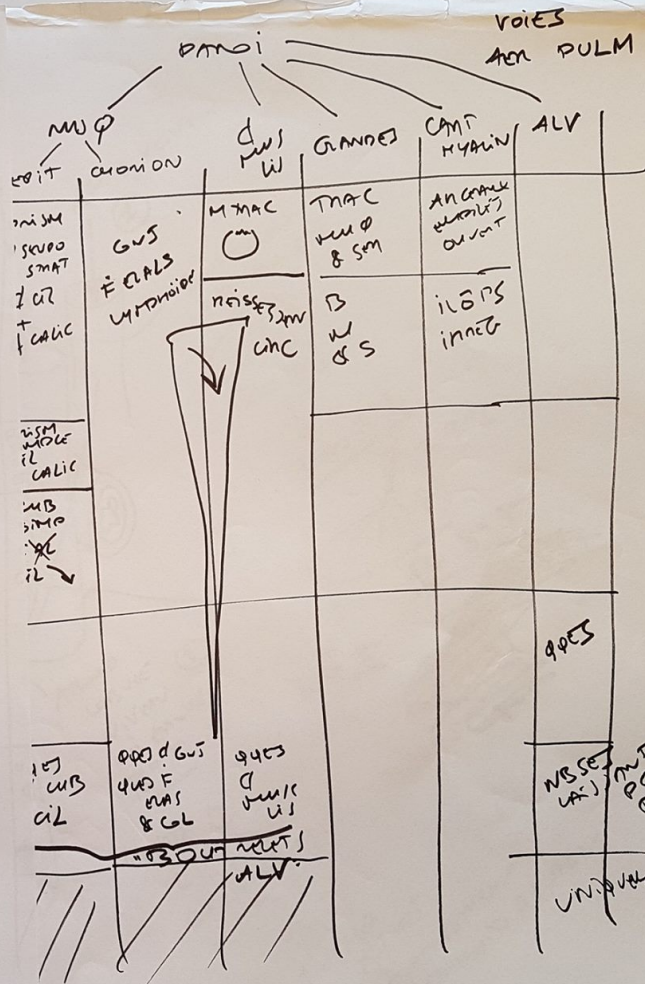


AL
A

KAM

BAT

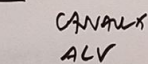
HISTO POINTE REJP



POI
SAT



Transition
& Retention



voies
AER PULM

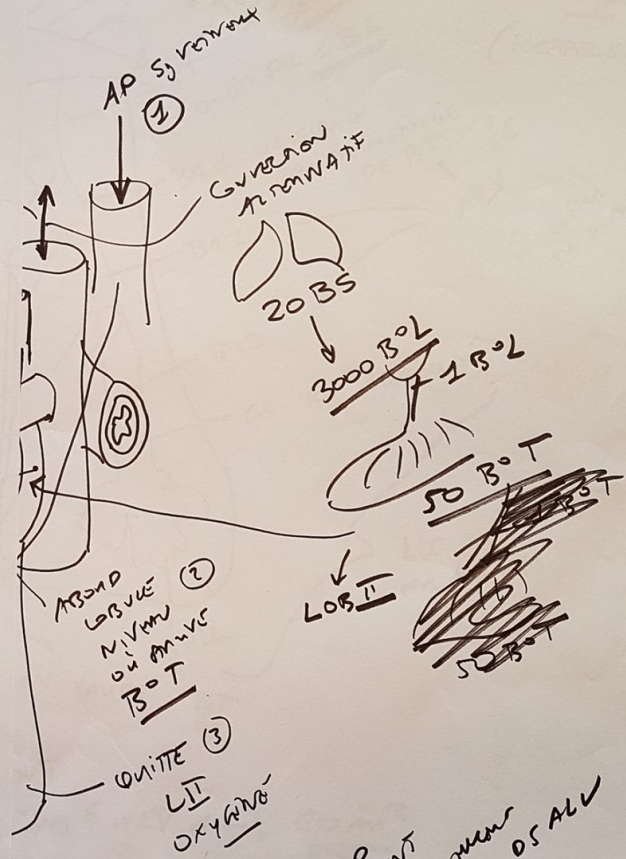
UNBSE
LAJ
MUT
PRAHAR
PANI
P-PR
QW
BOVINE?
UNBSE

Ai

ri CAL
mm

٥

LOBULE



EVANOUR PULM I
VENANT 13A

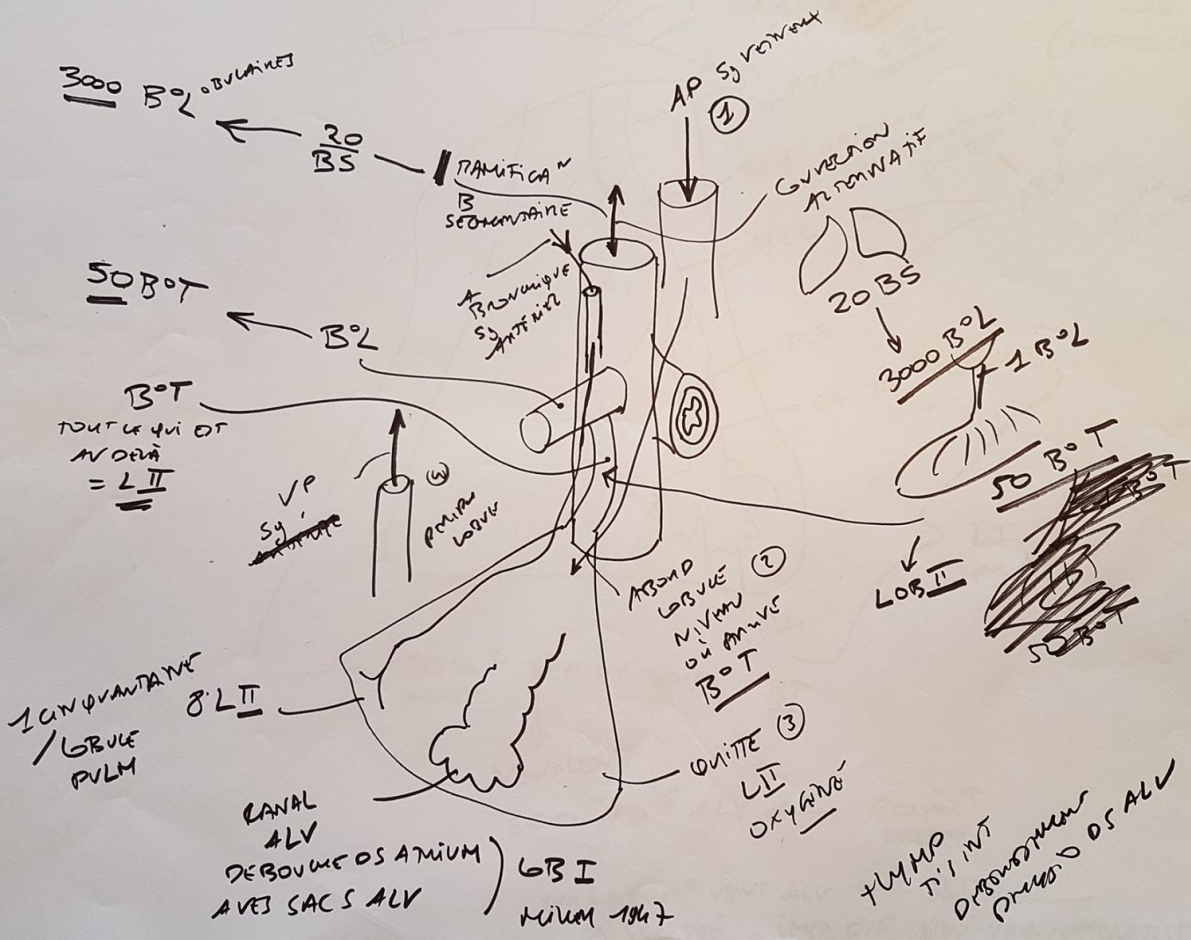
1967

PLUMP
TIT INT
OXYGENE
Press 0.5 ALV

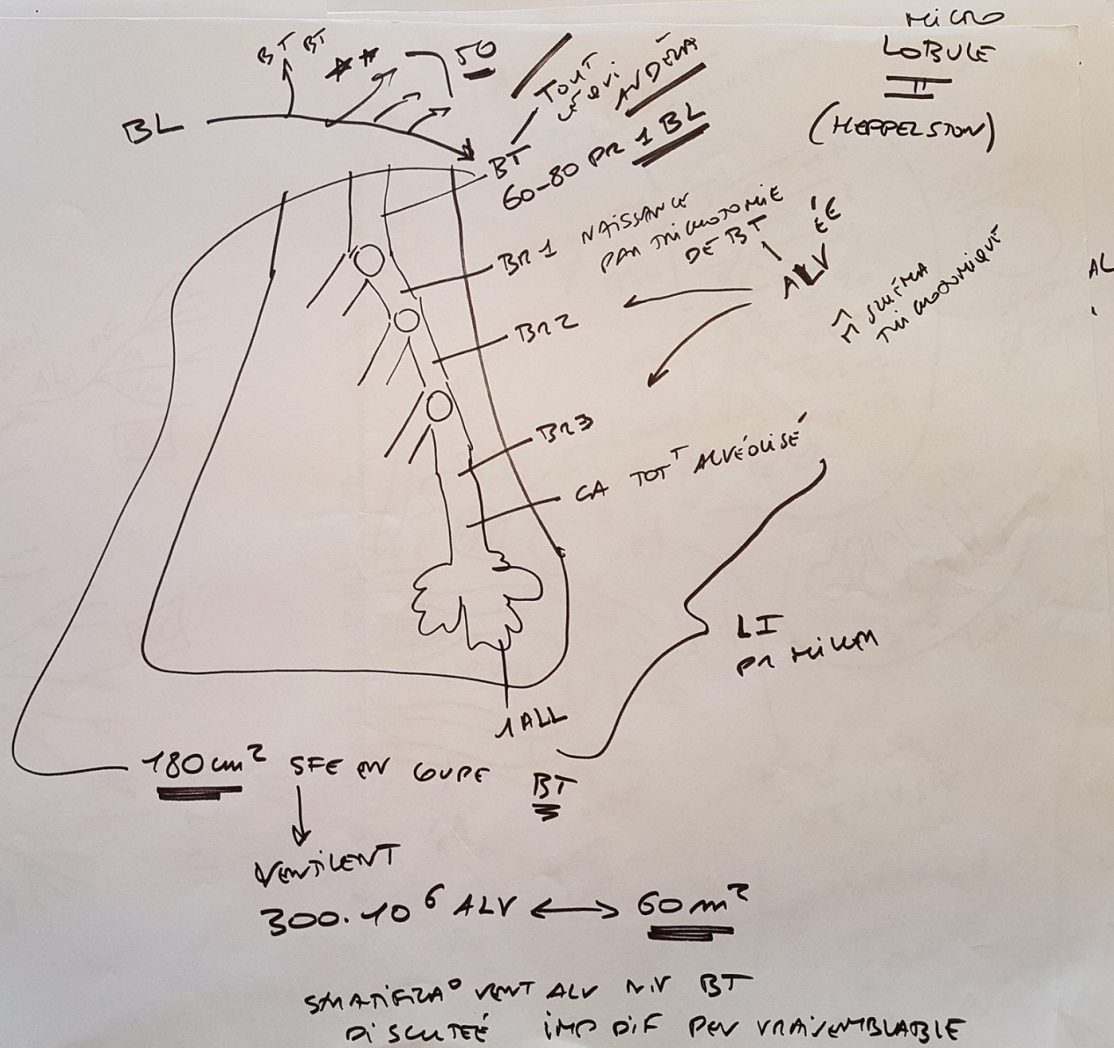
Bai

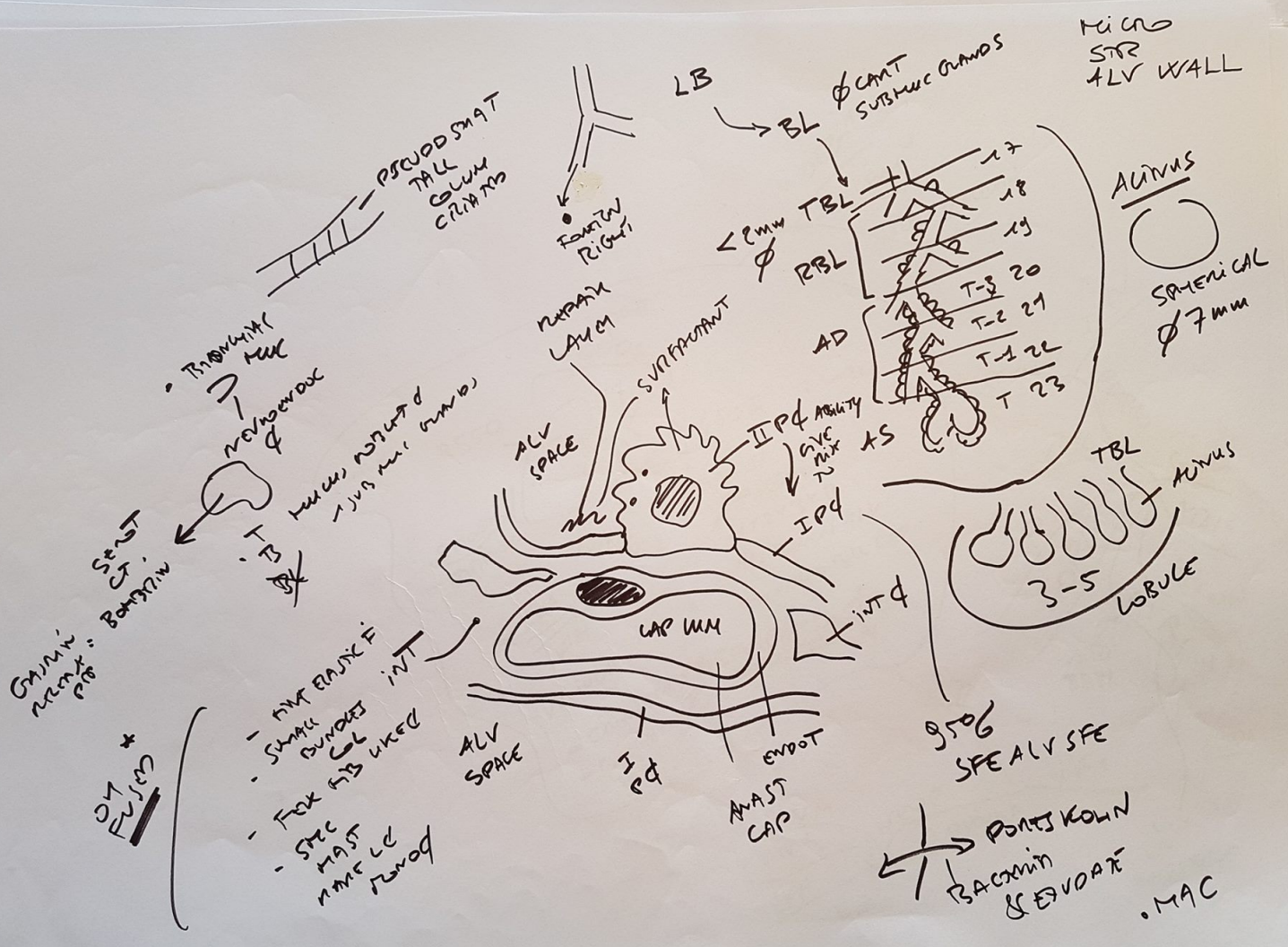
PHYSIO BAIUET 23

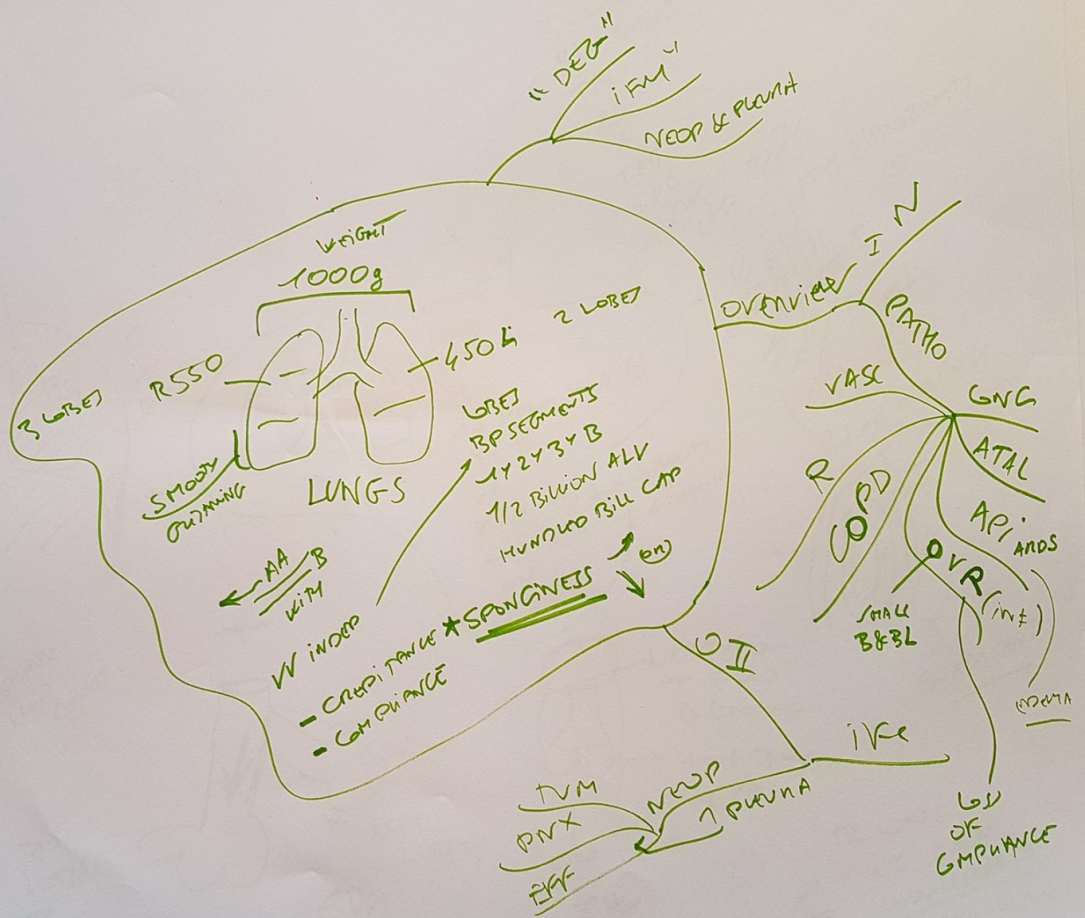
LOBULE



Bai





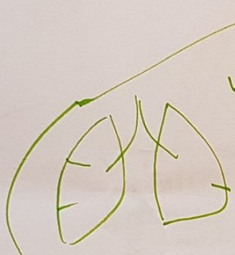
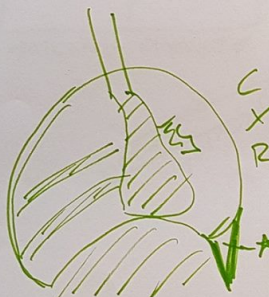


① CLEAR

② INFILTRATES?

③ SUMMITTUS
GROWTH
PROBABLY
EXPOSED?
TUBER VASCULAR NUT?

EXPLAN
120T
GROW

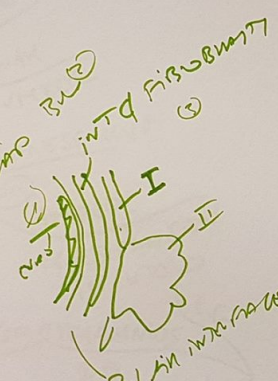


RIGHT
LOBE
SEAM

B
AA PULM - 11 B
AA B
VV PHEN vis
PAN PAN
NN

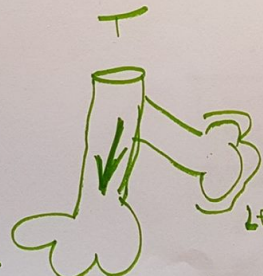
SMOOTH
&
GROWING

B-CANTIL
BL-CANTIL
TBL
AD
A
IPD
IPD
MTC
CAP

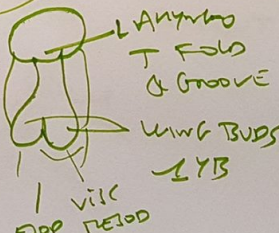


II
SURROUND

TR
LOBAR
B



LEFT
LOBES
6W

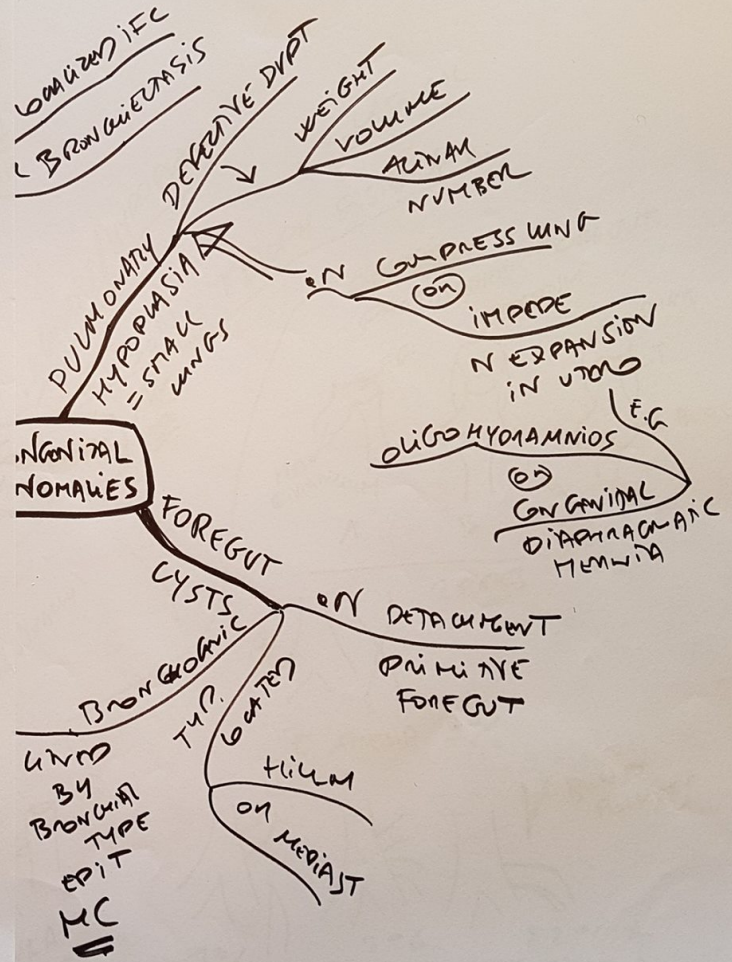
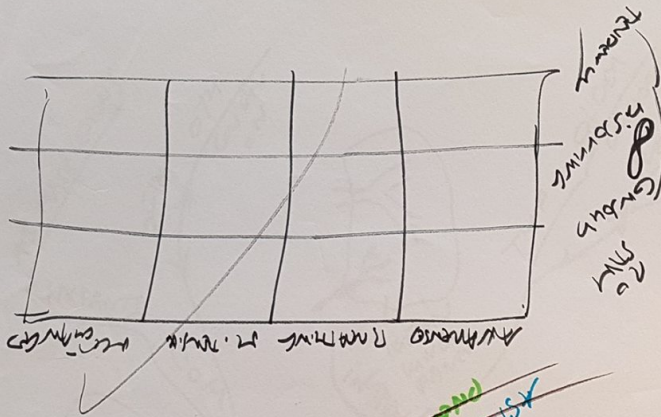


1 VILL
EPOD PEDOD
5W

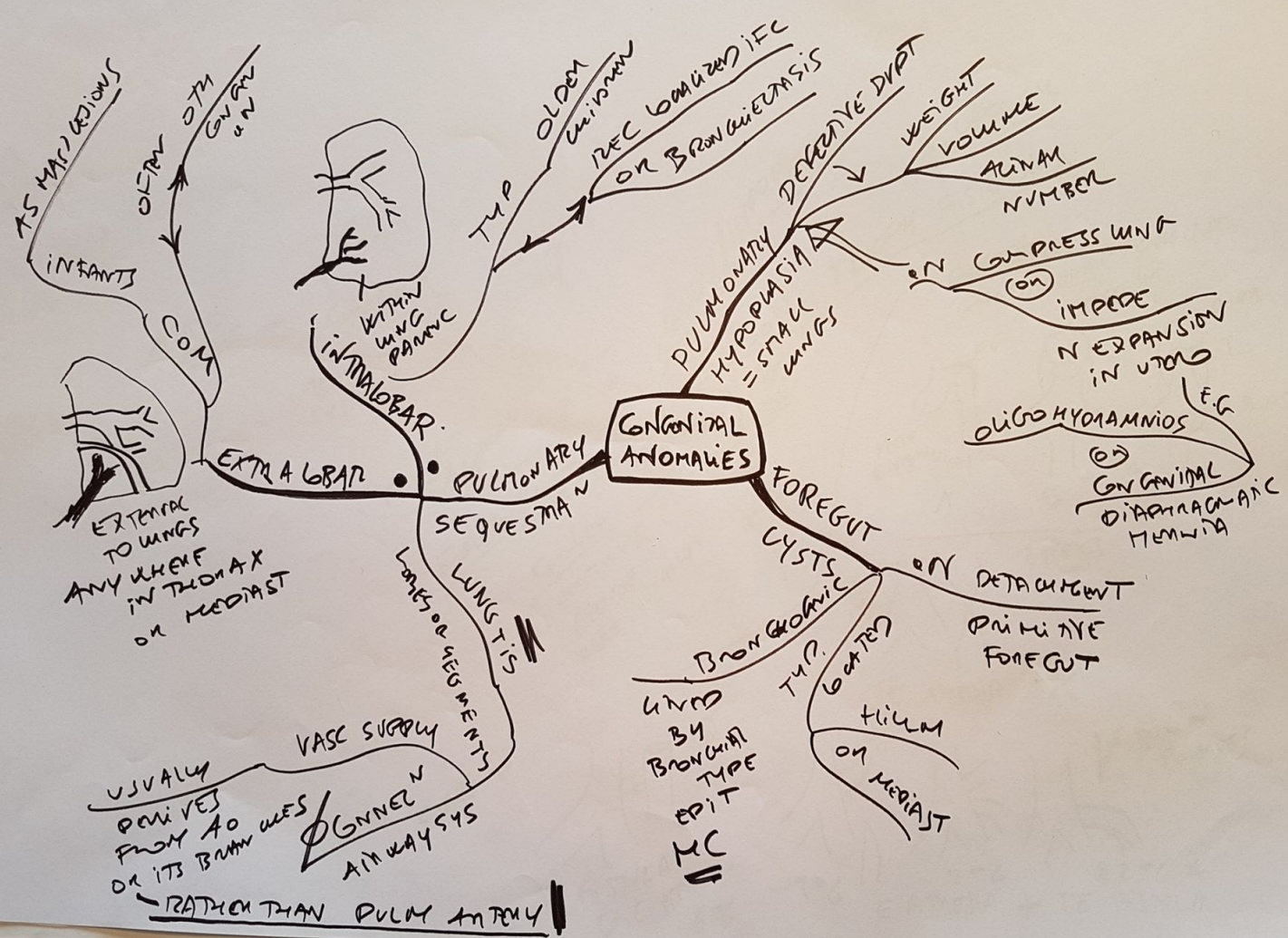
ANYTHING
T FOLD
& GROOVE
WING BUDS
LYB

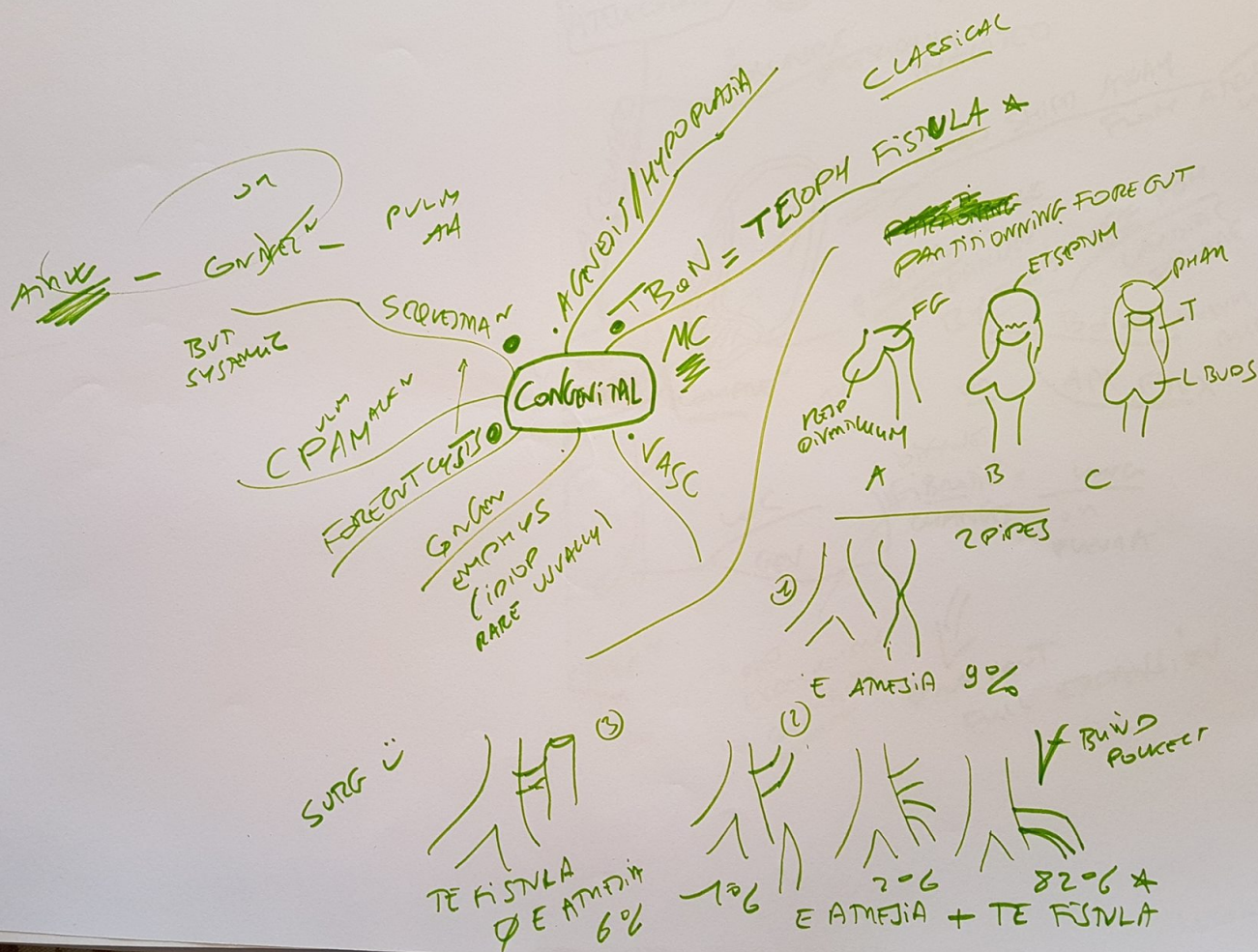
WING

2 ONE
13 MAIN
DOWNWARD
EMBRYOLOGICAL



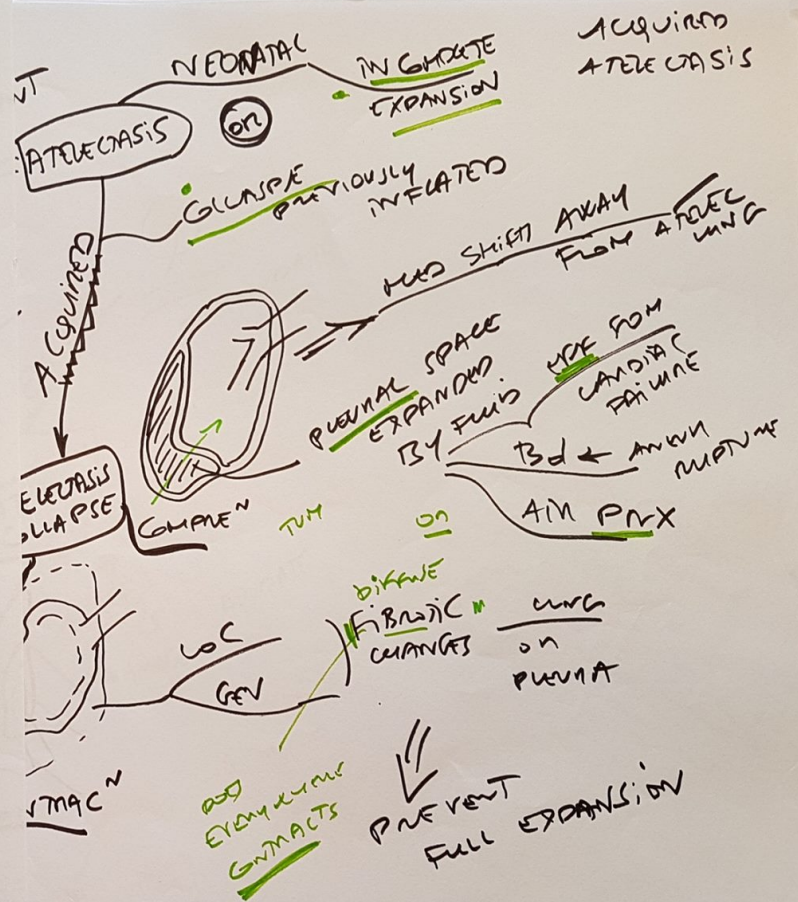
Congenital Anomalies





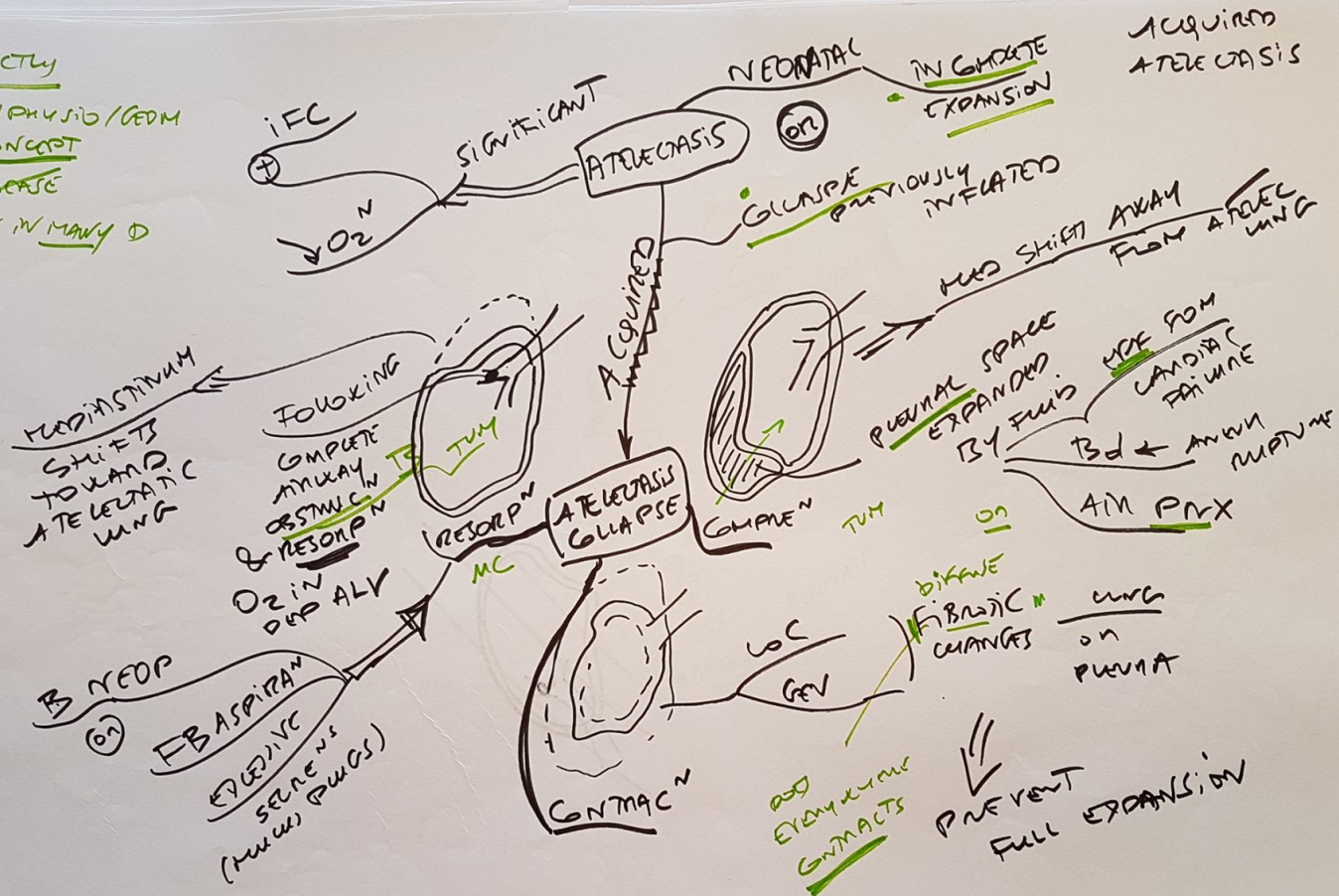
IRATORY
SPERM
A NEW
POINT OF VIEW

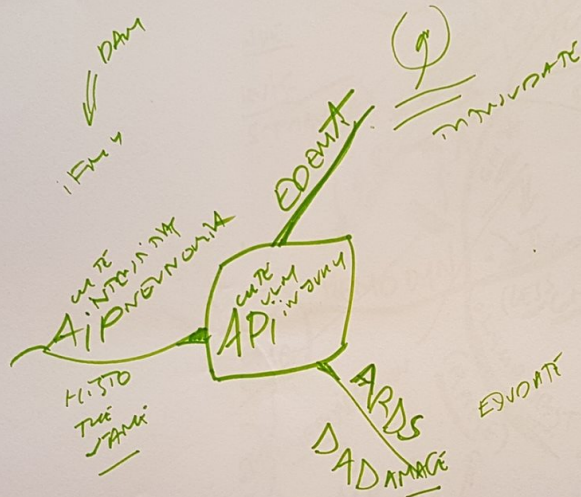
ATELECTASIS (GLAPSE)



ACQUIRED
ATELECTASIS

- Strictly
- ANAT / PHYSIO / GERM
 - CONCEPT
 - TO BE
 - SEEN IN MANY



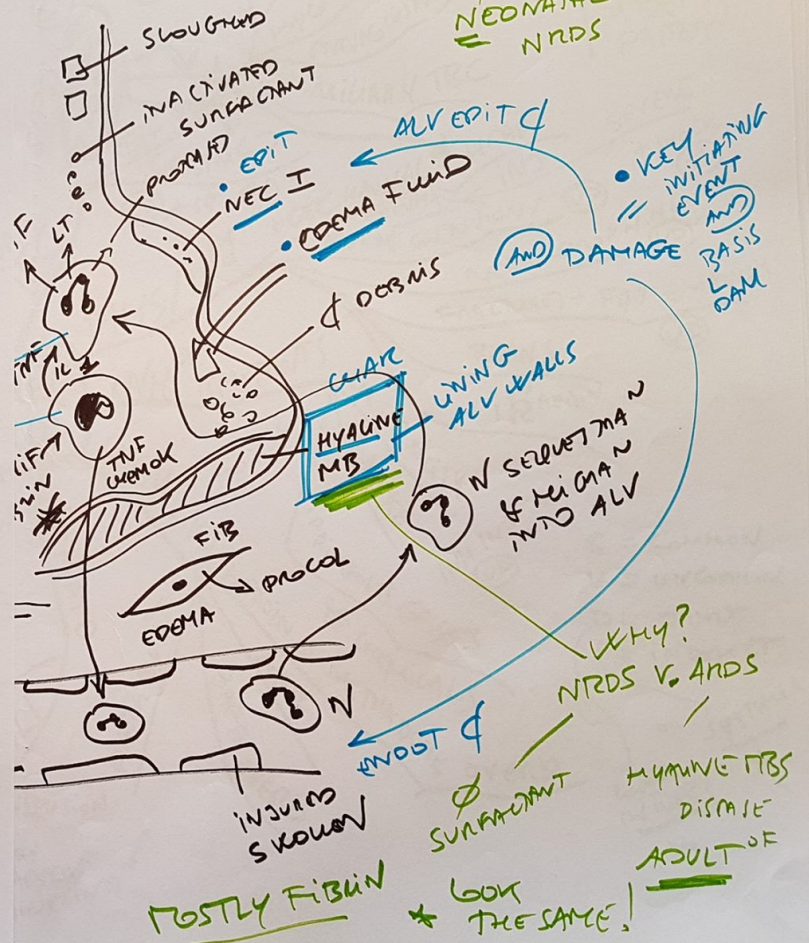




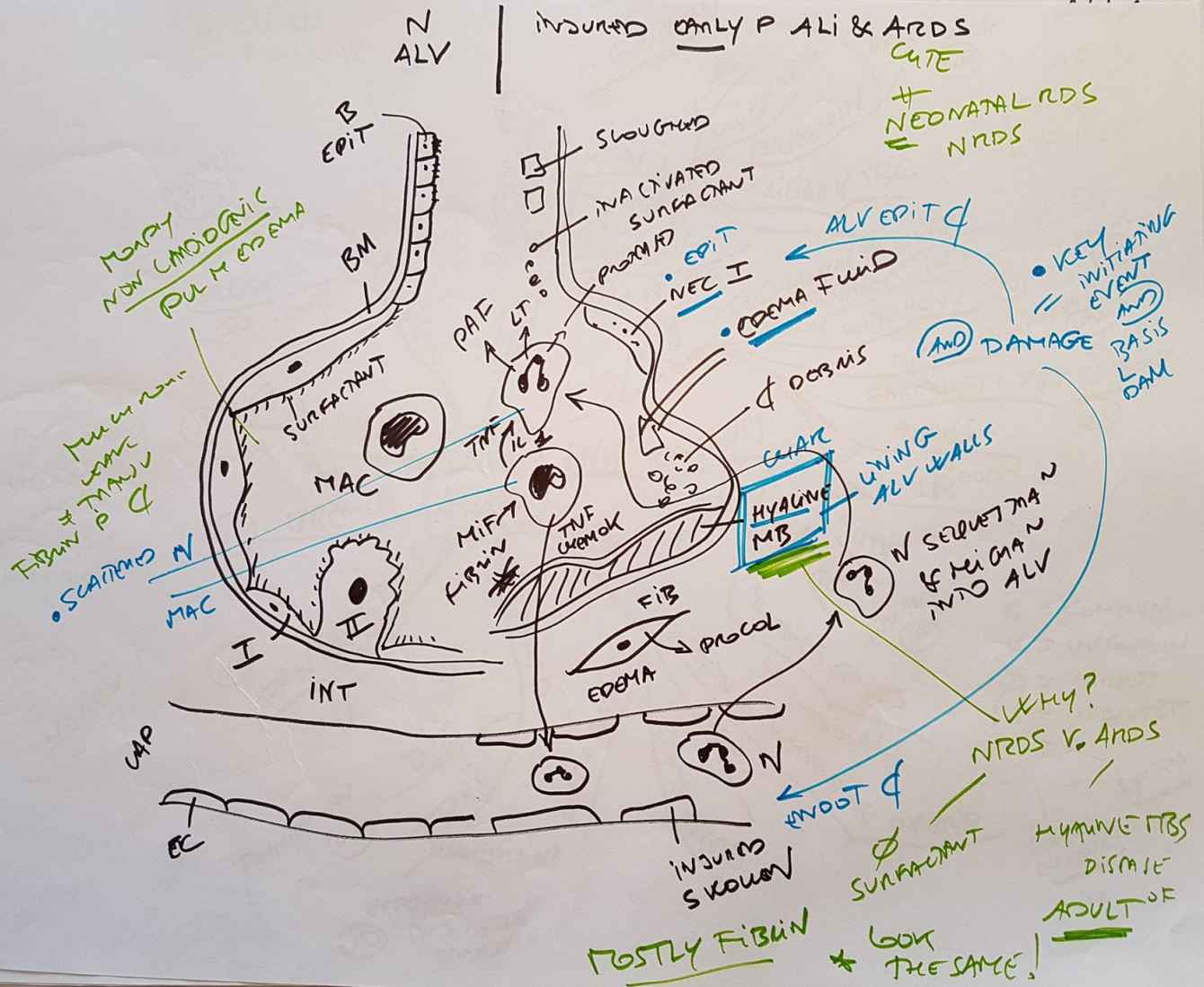
INJURED ONLY P ALI & ARDS

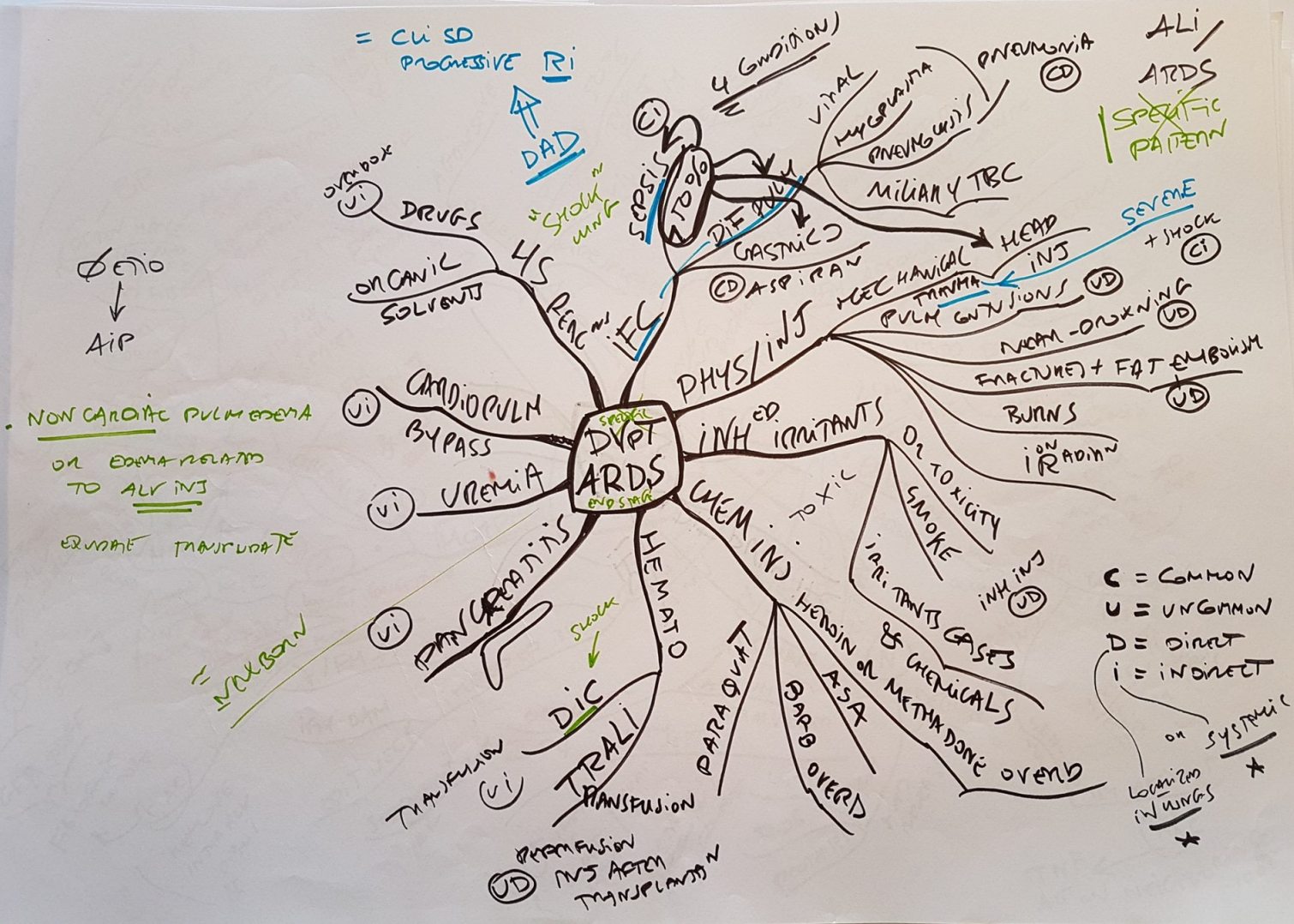
CUTE

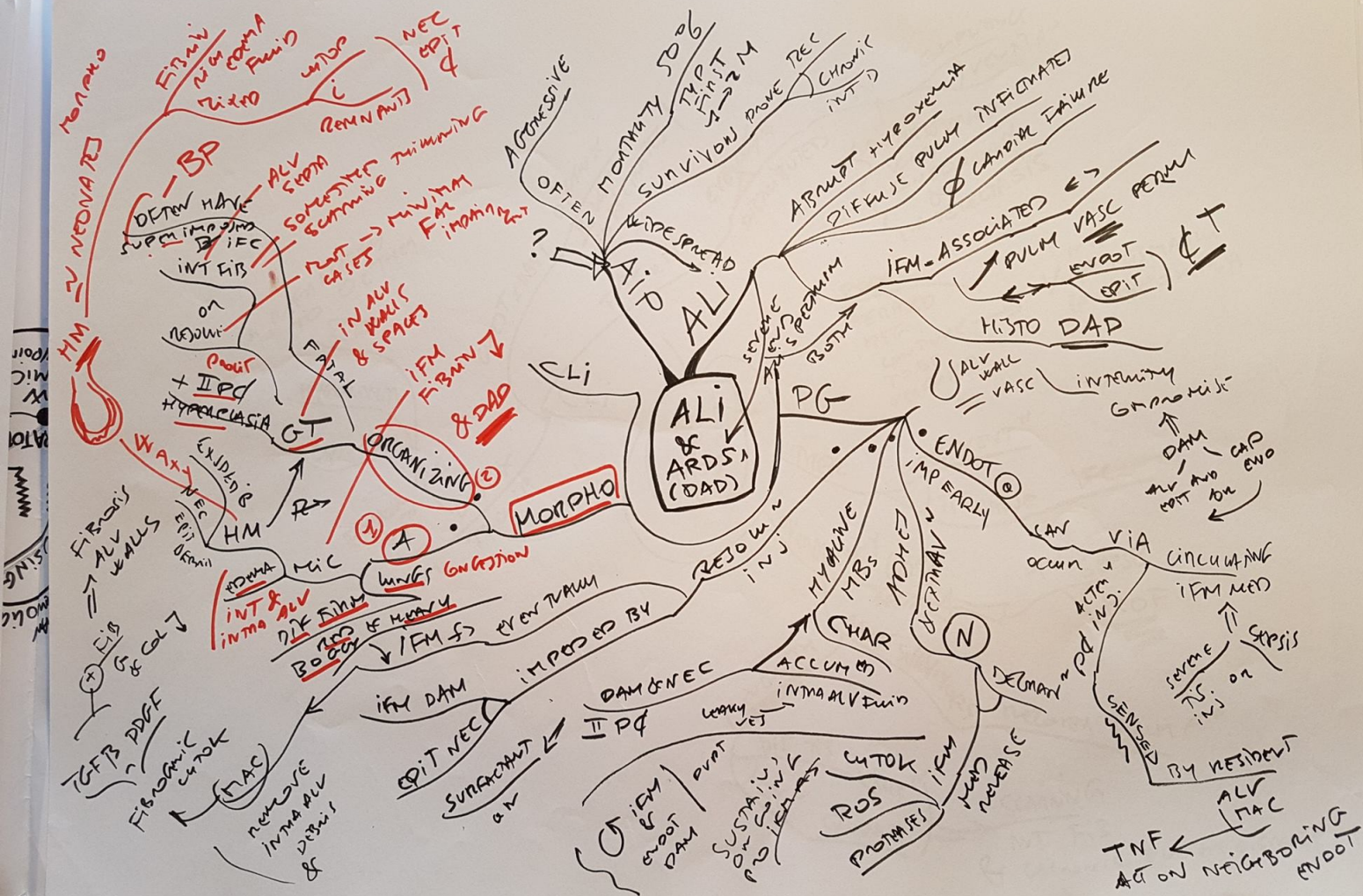
+ NEONATAL RDS
= NRDS

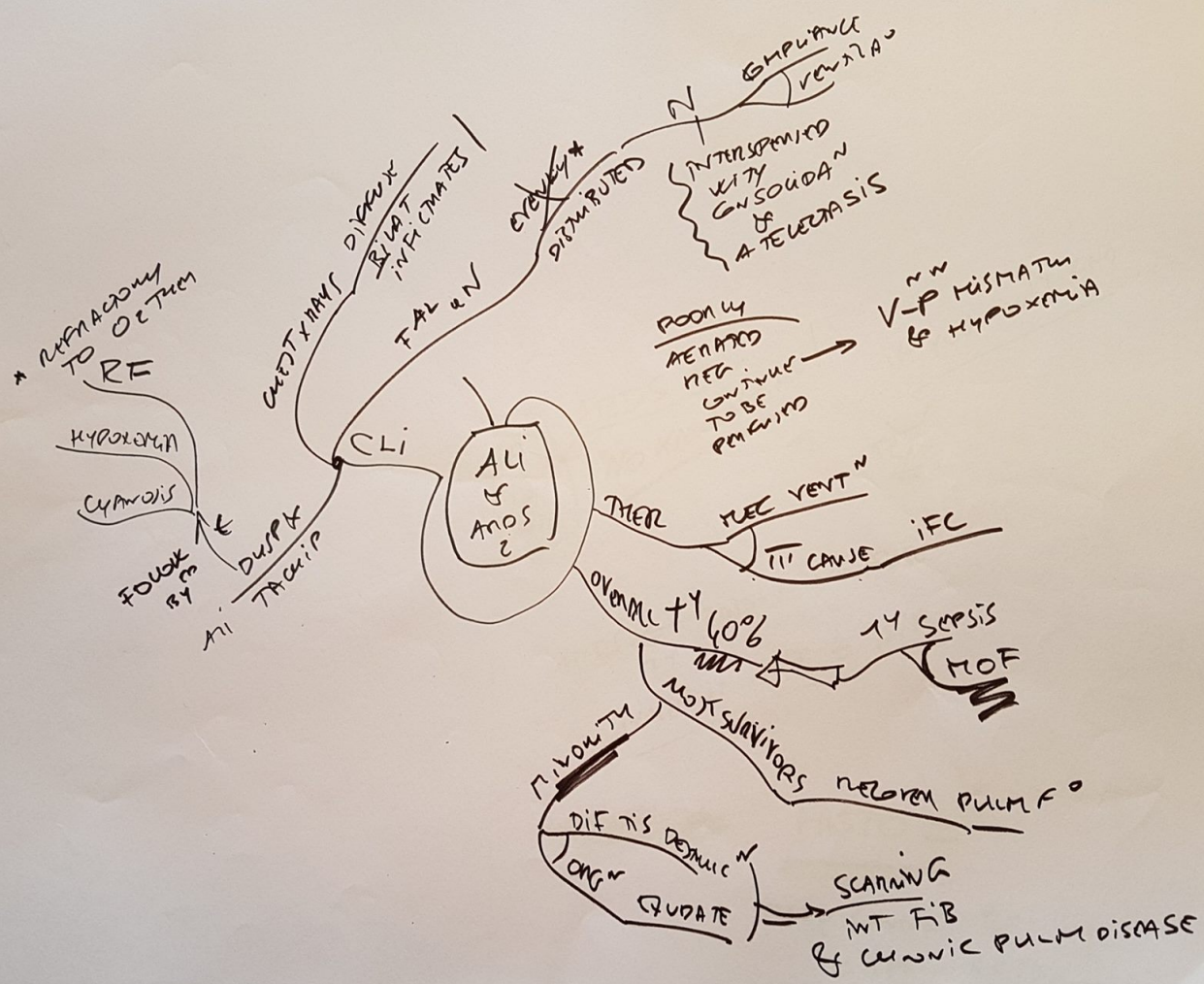


ALI & ARDS (DAD)









SPECTRUM

ACUTE
INTERSTITIAL
PNEUMONIA

ARDS +
NO KNOWN ETIO!

IF YOU DON'T KNOW

~~PK~~

ARDS $\leftarrow$ SOMETHING ELSE
24
WHEN IT ISN'T = AIP

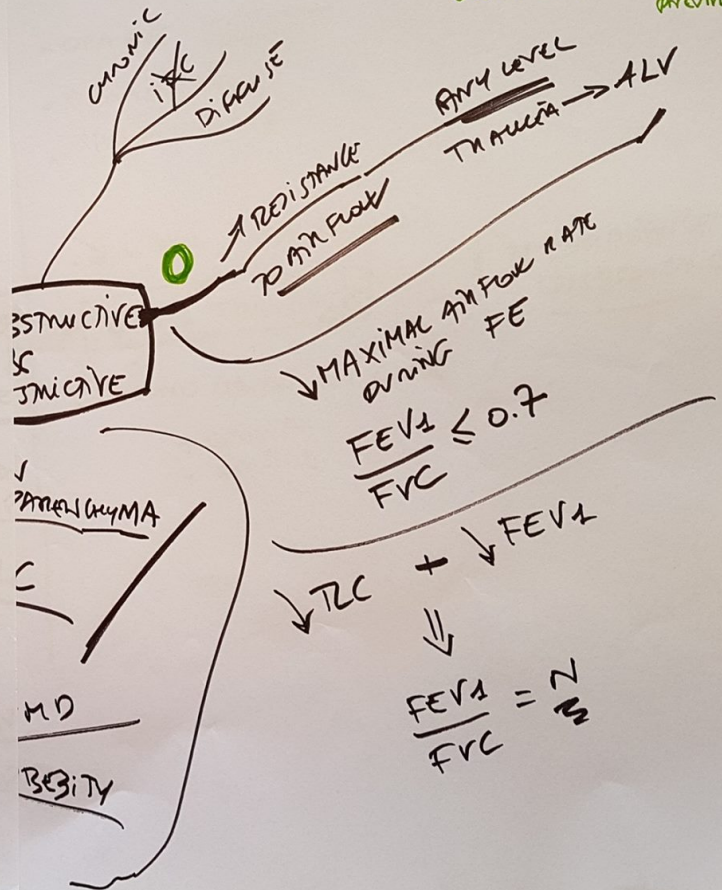
~~HISTO~~

HISTO =

THEY CANNOT BE
DIFFERENTIATED!

"FUNCTIONAL" CLASSIFICATION

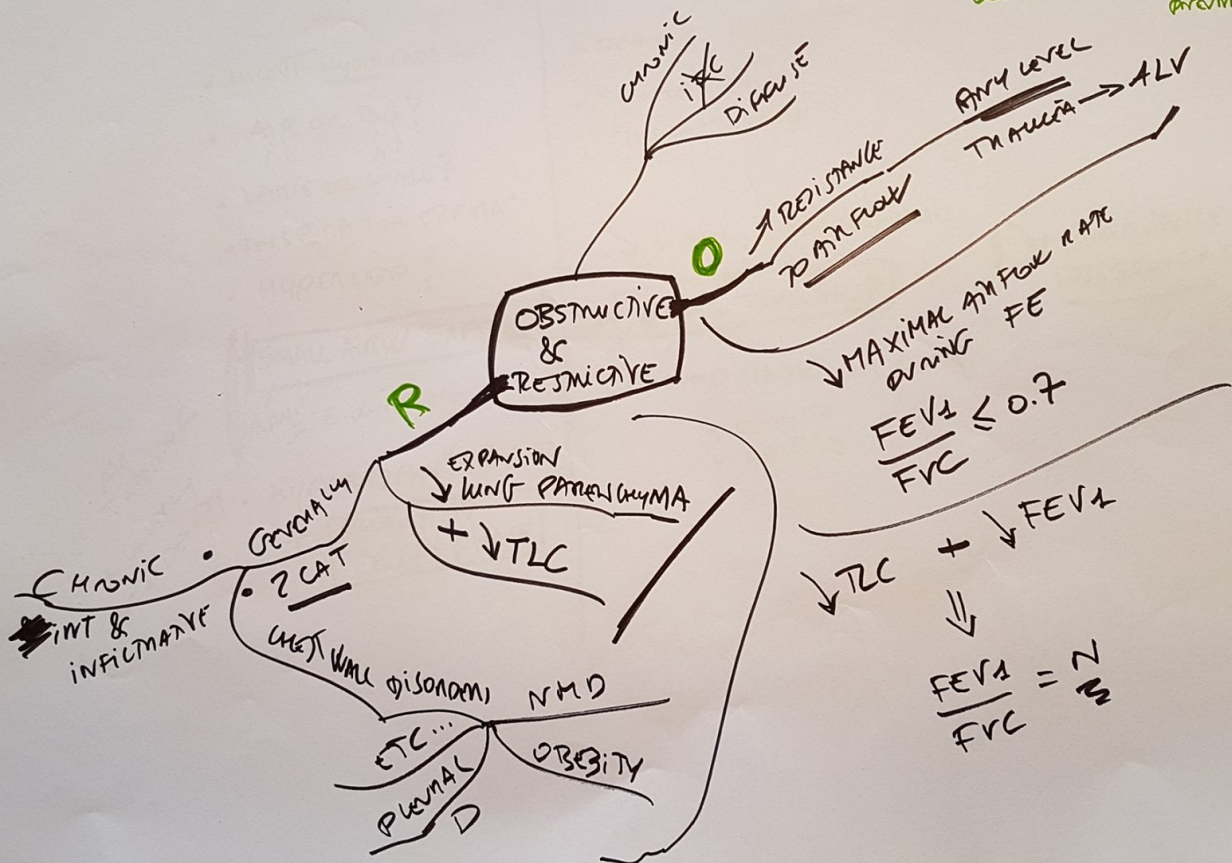
MAJORITY OF PULMO
W/ ARE NOT IF
PREVIOUSLY



OBSTRUCTIVE & RESTRICTIVE

"FUNCTIONAL" CLASSIFICATION

MAJORITY OF PULMO
DISEASES ARE NOT IFD
PREVAILING



O R

- LUENT HYPOCAPITANT
- AIR ON TBd?
- LARGE OR SMALL?
- INSPIRATION OR EXPIRATION
- HYPERCAP?

SMALL AIRW EXPIRAN

BRIMIN = E KNEEZING

ALL THINGS

+ LUNGEY
RESIDENCY

- HYPEREXPIRAN ON CXR
- + **PROLONGED EXPI PHASE**

- OPAQUE HYPO
- "COMPLIANCE"
- "INFLAMMATIVE"

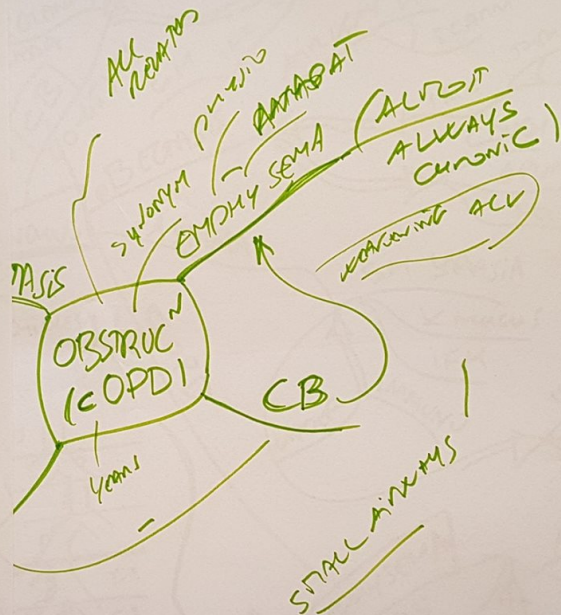
→ L VOL, DYSP, CYANOSIS

• **↓ GAS TRANSFER**

• "GROUND GLASS" ON CXR
+ OPAQUITY
+ DENSITY

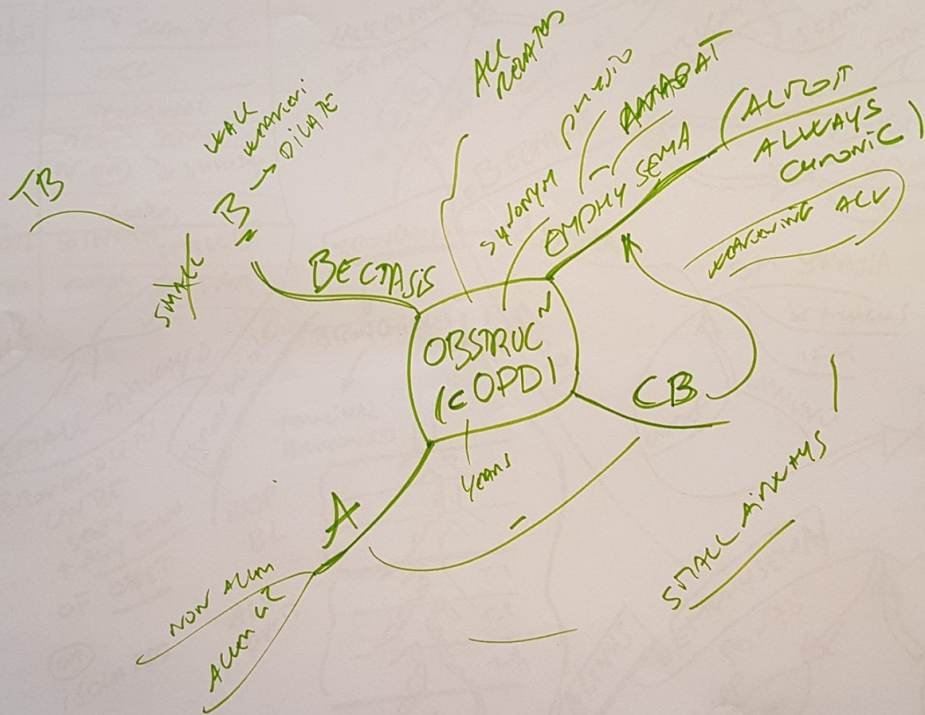
→ COMPLIANCE
LESS SPONGINESS!

SPECTRUM

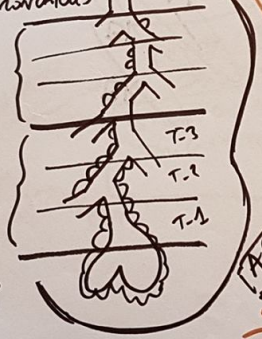
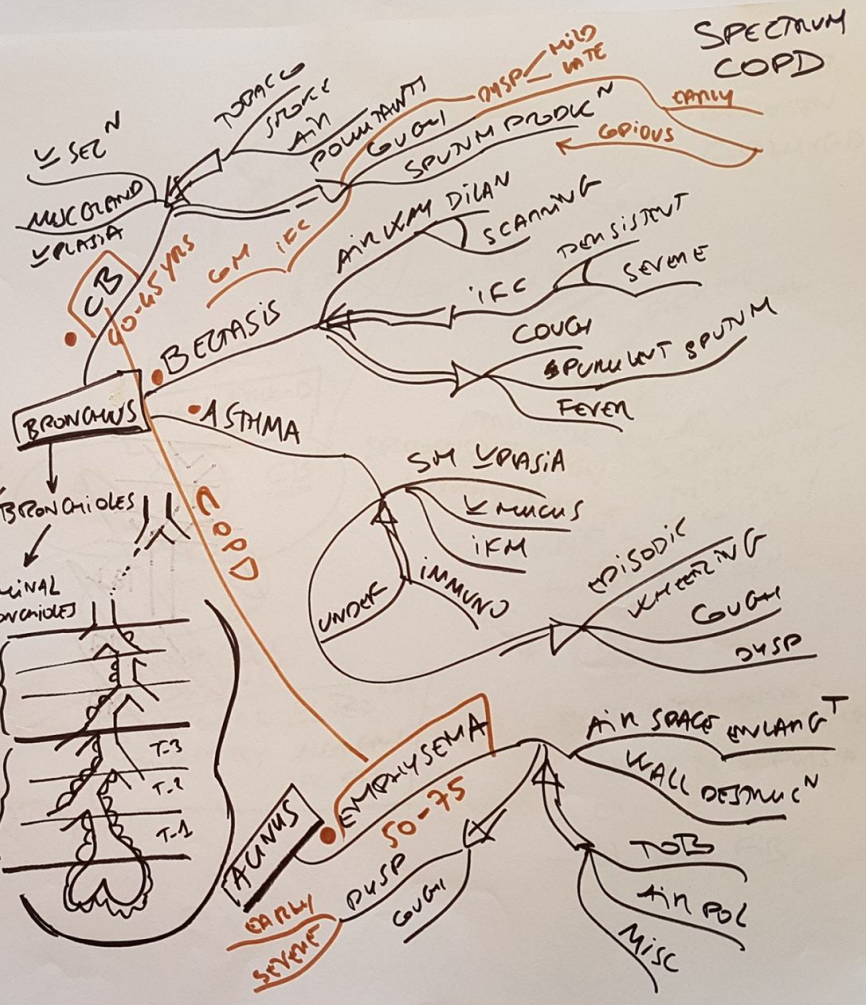
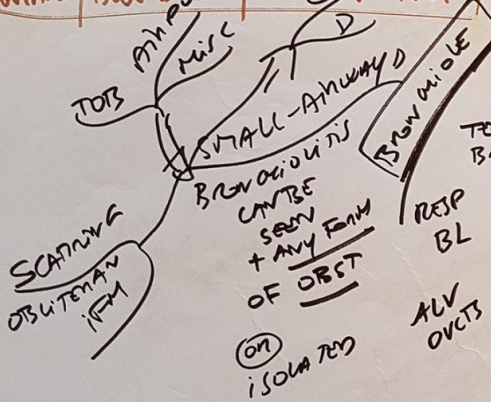


OBSTRUCTIVE

SPECTRUM



	PRE D B	PRE E
AGE	40-45	50-75
DYSP	MILD LATE	SEVERE EARLY
COUGH	CHRONIC COUGH	LATE SCANNING
IFC	COM	OCC
RI	REPARATED	TERMINAL
CONVULS	COM	NAME TRAM
ATHE R	+	N ON
CRASH	N	LOW
CHEST R	PRODUCTION	SINUS
ADMAN	BLUE BOAT	PINK PUFFY



CAN ALSO
HAVE
5 FEATURE
4

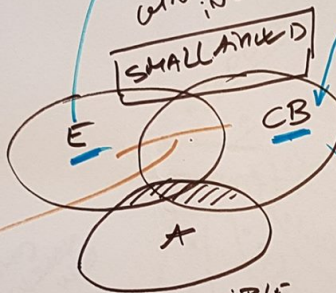
TYPICAL
COPD

- ALV WALL DESTROYED
- OVER INFLATION

Bronchospasm
HO WEVER
CAN DRIFT
to COMPONENT

MOST PATIENTS
HAVE SOME DEGREE OF
CHRONIC
IND

SMALL AIRWAYS
E.G. SMOKE



REVERSIBLE
OBSTRUCTION

BRONCHIAL $\rightarrow$ REVERS
TRIGGER BY ALLERGENS
IFC ETC

REF
FOR BOTH

OVERLAP
BETWEEN
COPD AND

SMOKING
--- AIR POL

- PERSISTENT CUGH
- AIRWAY IEM

PERSISTENT

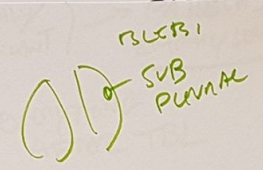
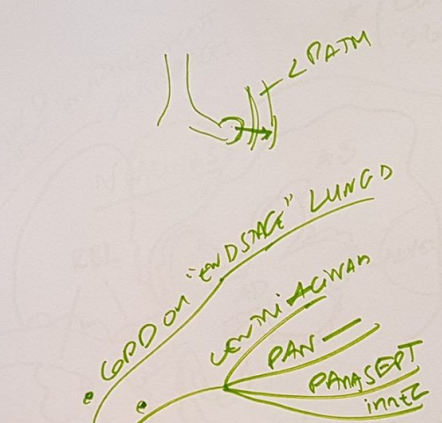
MUCUS $\neq$ SECRETION

TRUSTO

- ENLARGEMENT MUCUS
SEC GLANDS
- GLOBULIN $\neq$ PLASMA
- CI
- BL WALL FIB

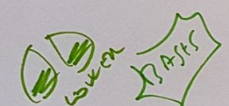
- ① HYPER EXPANSION
- ② FLATNESS DMAP (BUNTERS)
- ③ "BULLAE"
- ④ "WUCCERY" "UNCOM/MUNTS"

Banner Chest
APX BUL



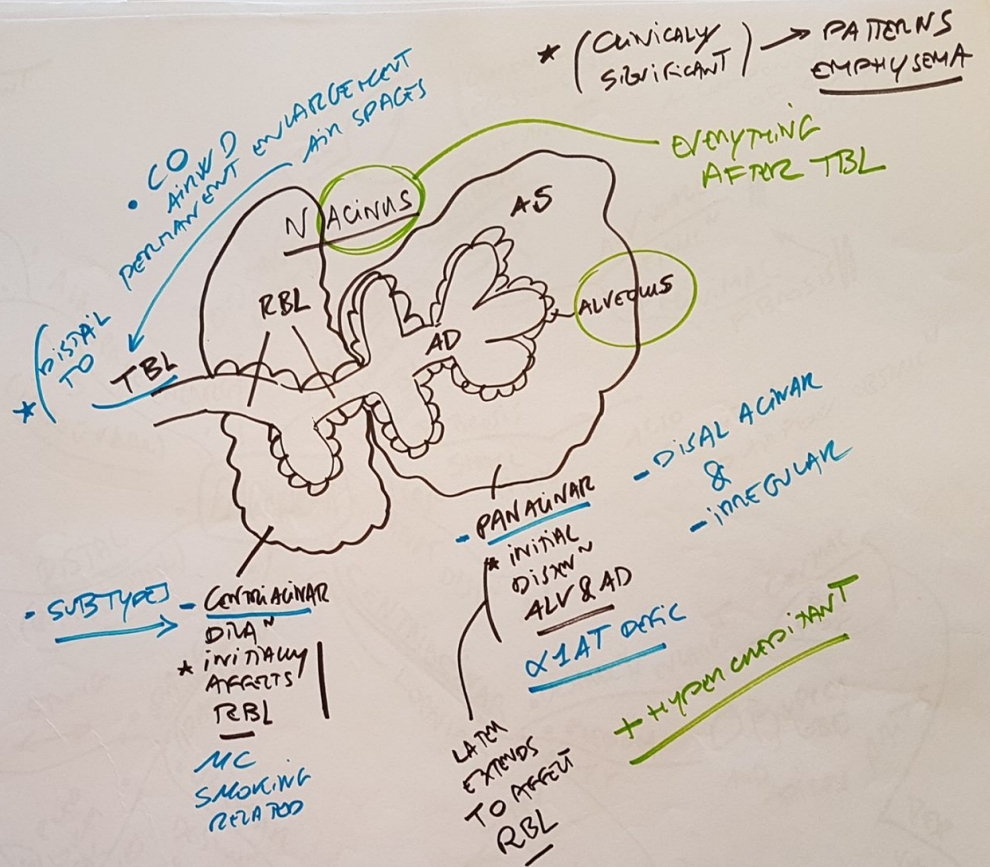
EMPHYSEMA

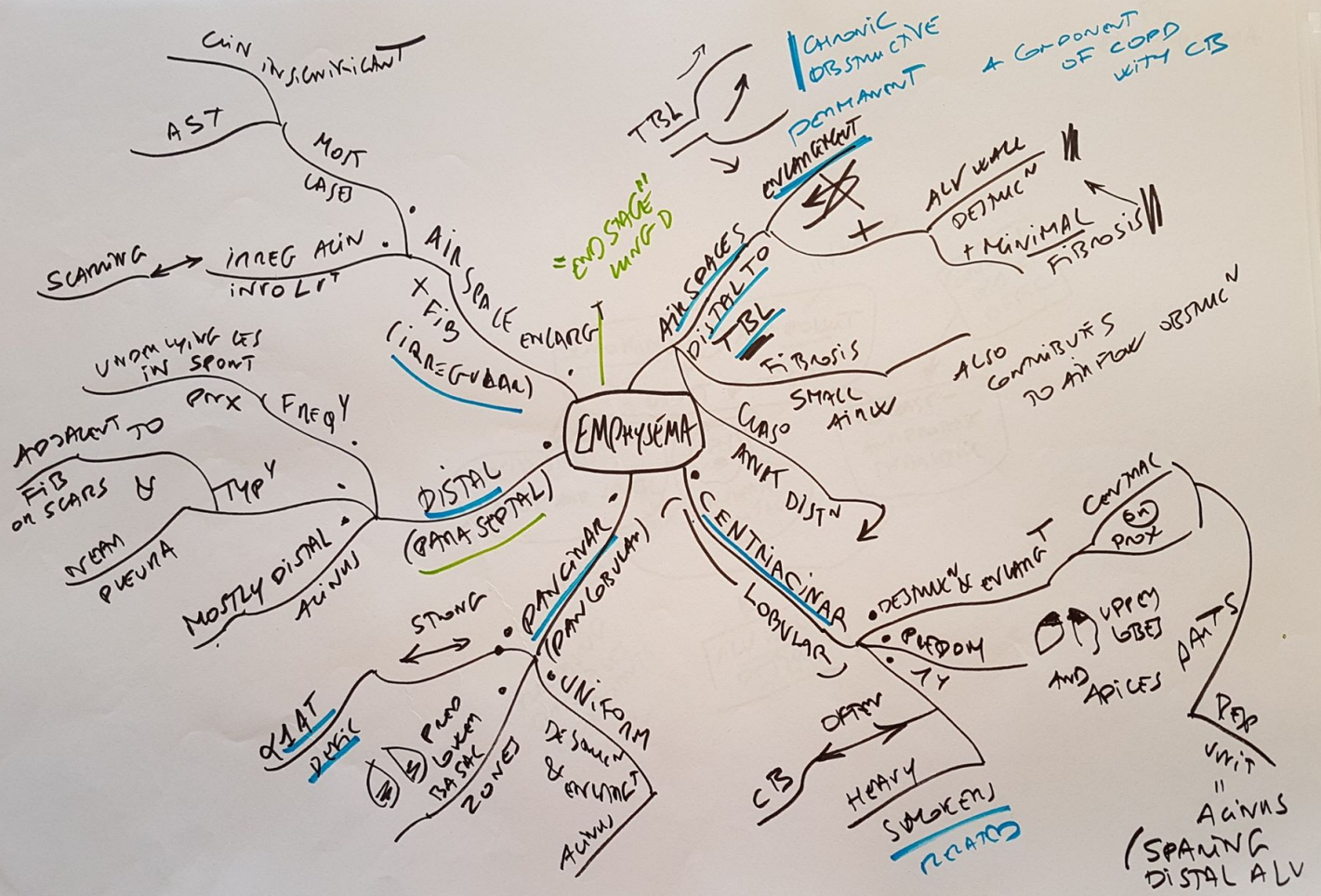
(PROGRESSIVE) EXP
 LIKE CIR THOUGHT
 SPECIFIC
 GOLF BALL
 HALL MARKS OF COPD
 PNX
 * MCC *
 * BUT *
 90%
 LT STORERS
 ALL PRACTICAL PURPOSES
 REGARD TOBACCO AS USUAL CAUSE
 OR MULTIPLE CHRONIC SMALL AIRWAYS OBSTRUCTIVE ETIO
 END SPACE
 WHEELING
 AB
 CB



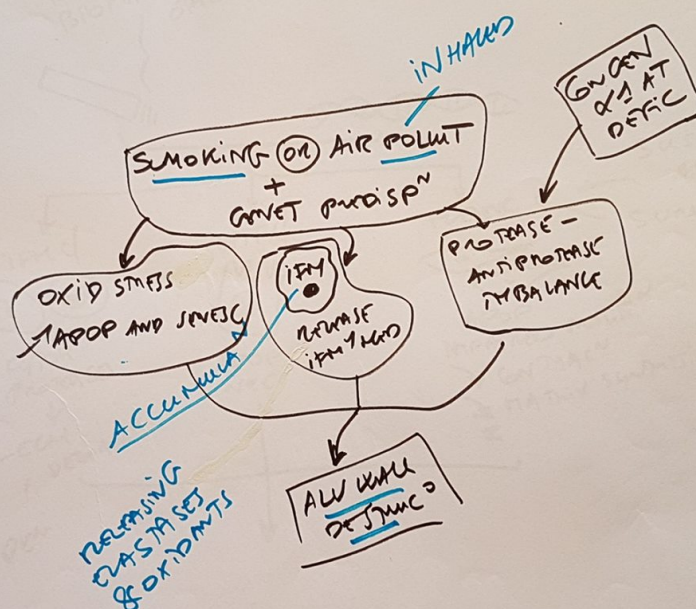
* A YOUNG STOKER + SIGNIFICANT
 BILASILAR COPD & AVOIDER
 MOST SUSPECT FOR α -1AT DEFIC (GENETIC)

PROG FAILURE
 LIKE4
 CIN
 REC
 PNEUMONITIS
 ADOLAR
 UNIMPACTANCE
 PULM IMPACT

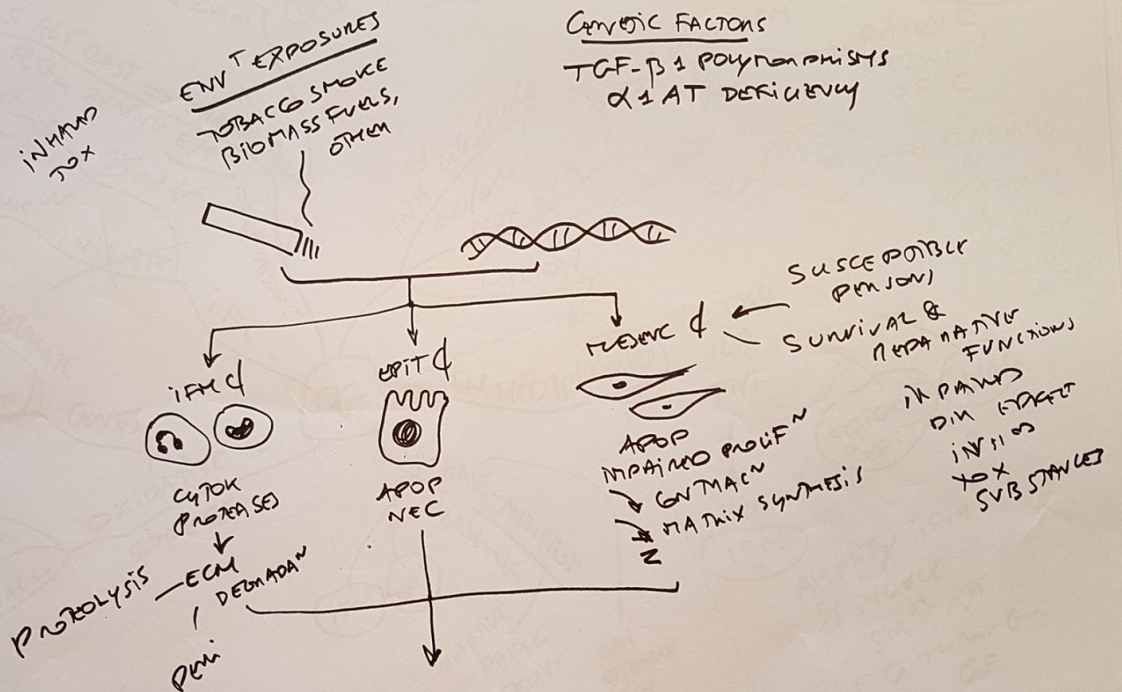


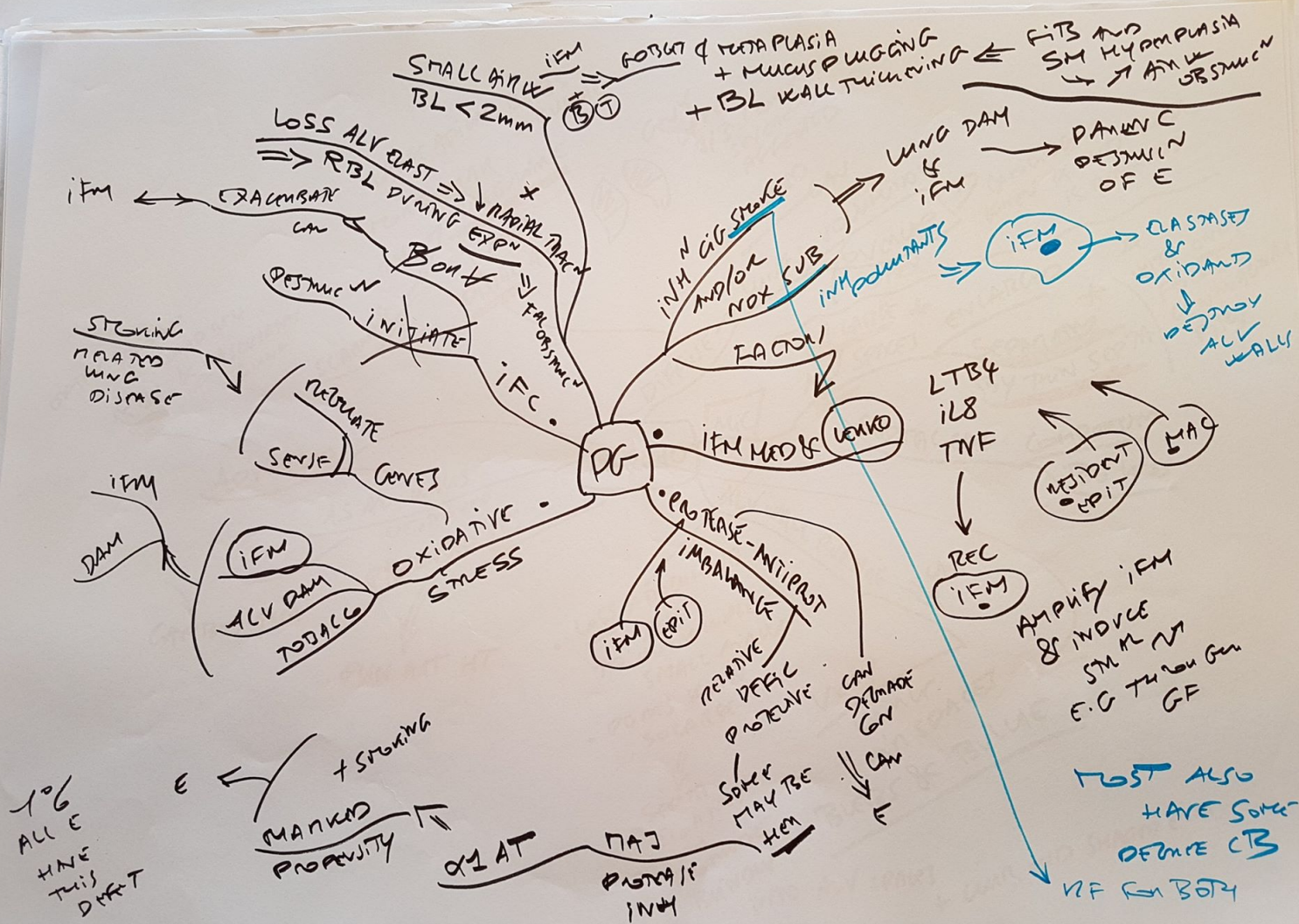


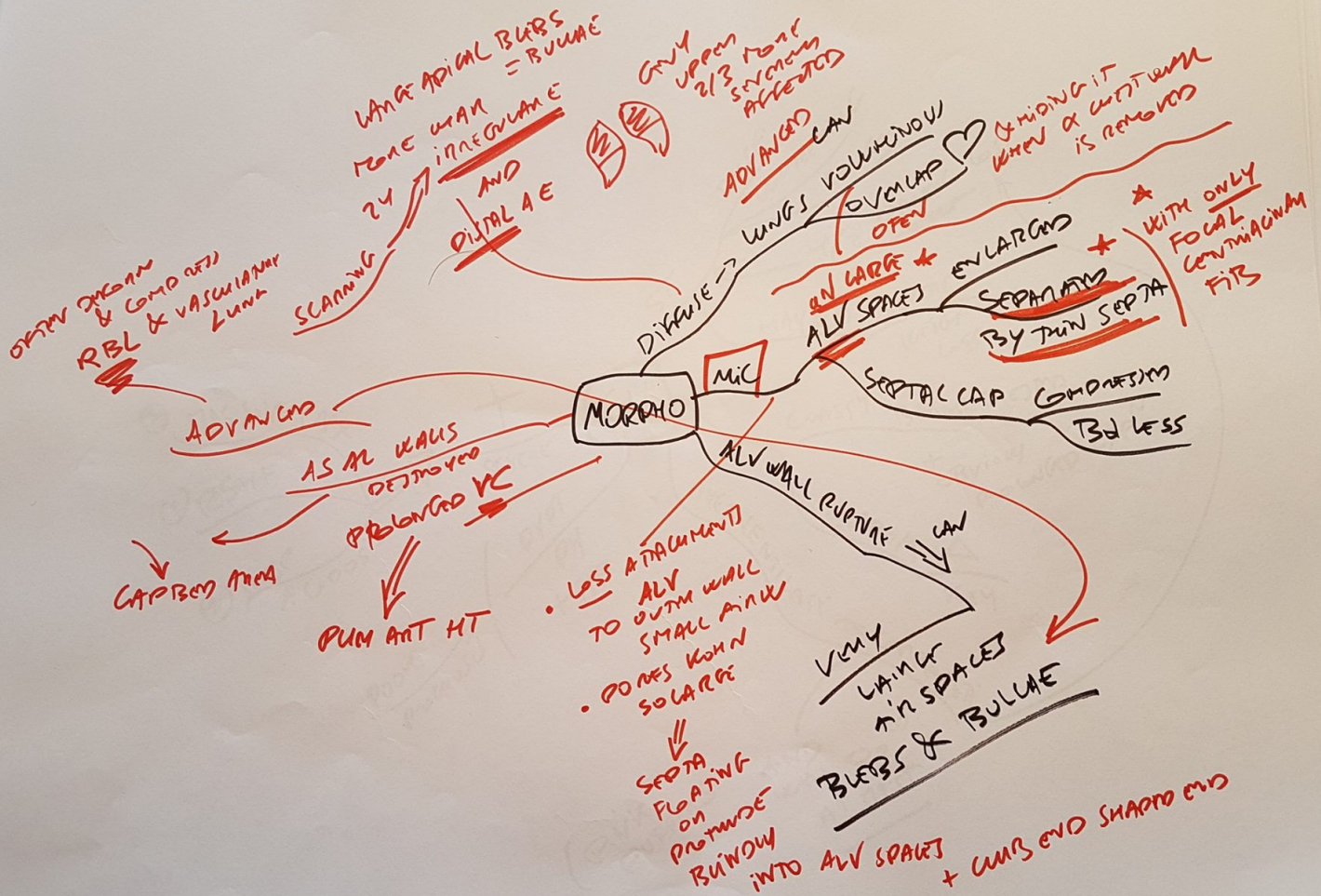
PG
EMPHYSEMA

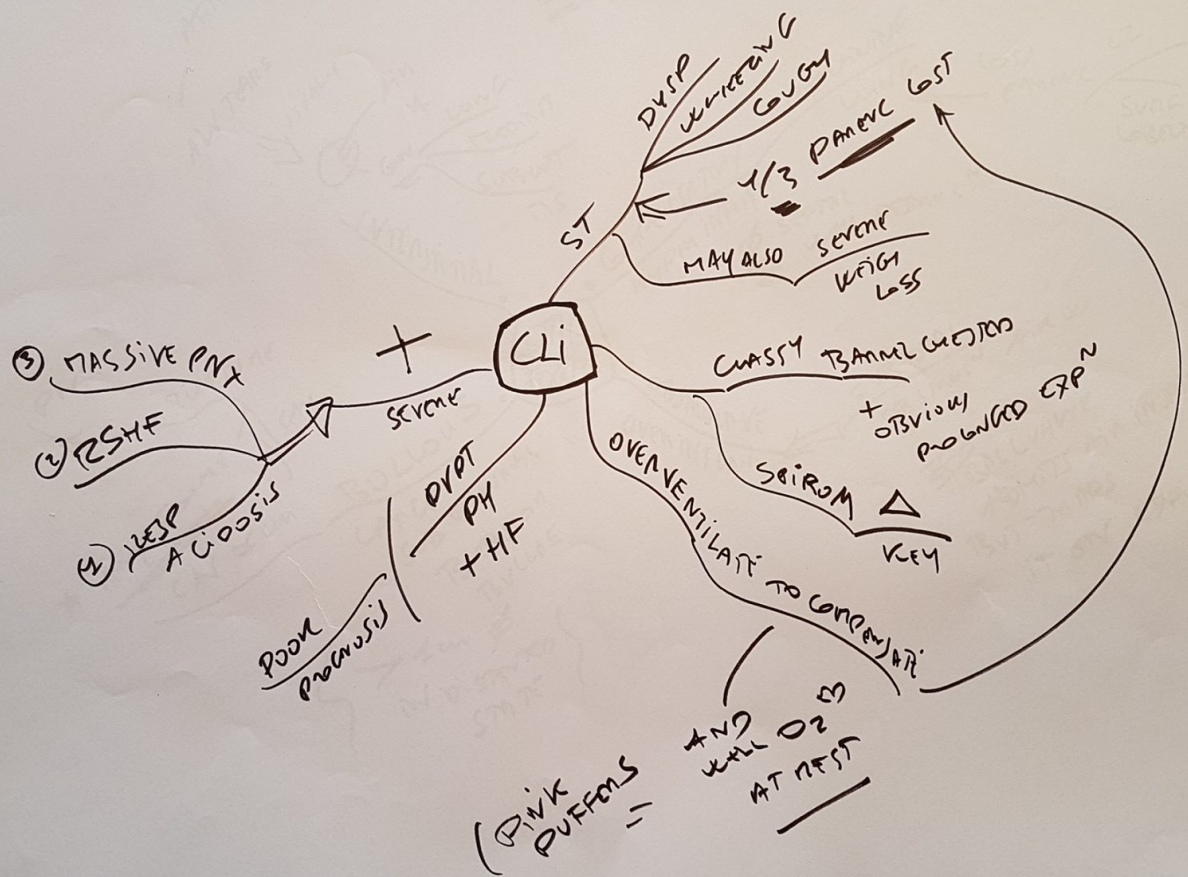


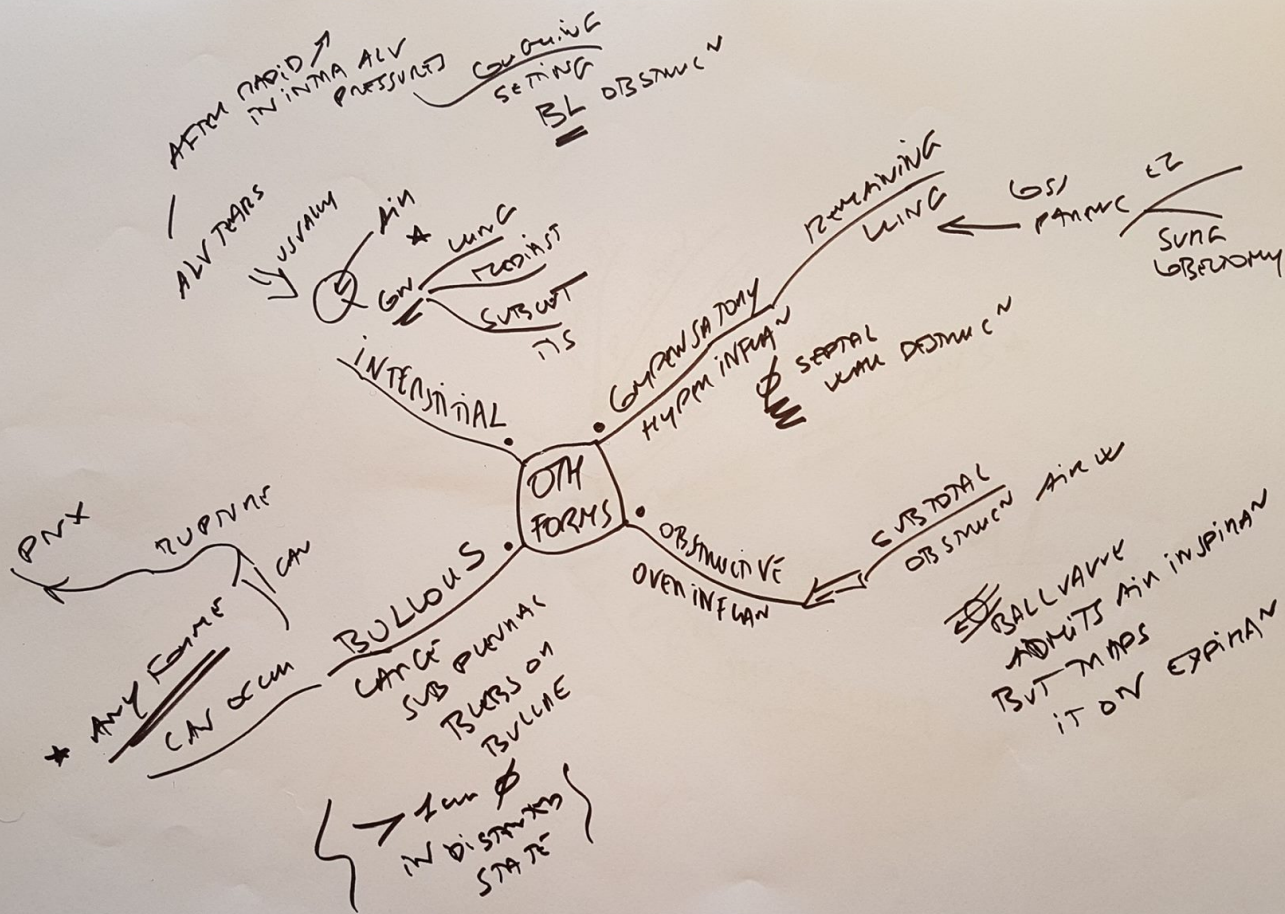
LOSS OF α_1 HORMONES
IN EMPHYSEMA PG









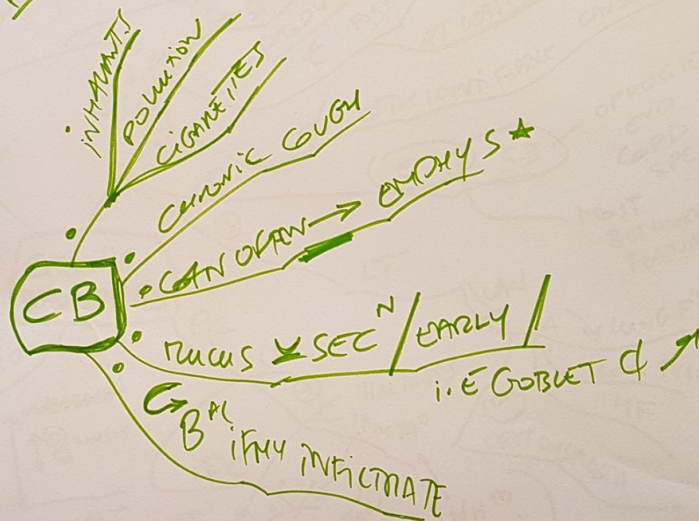


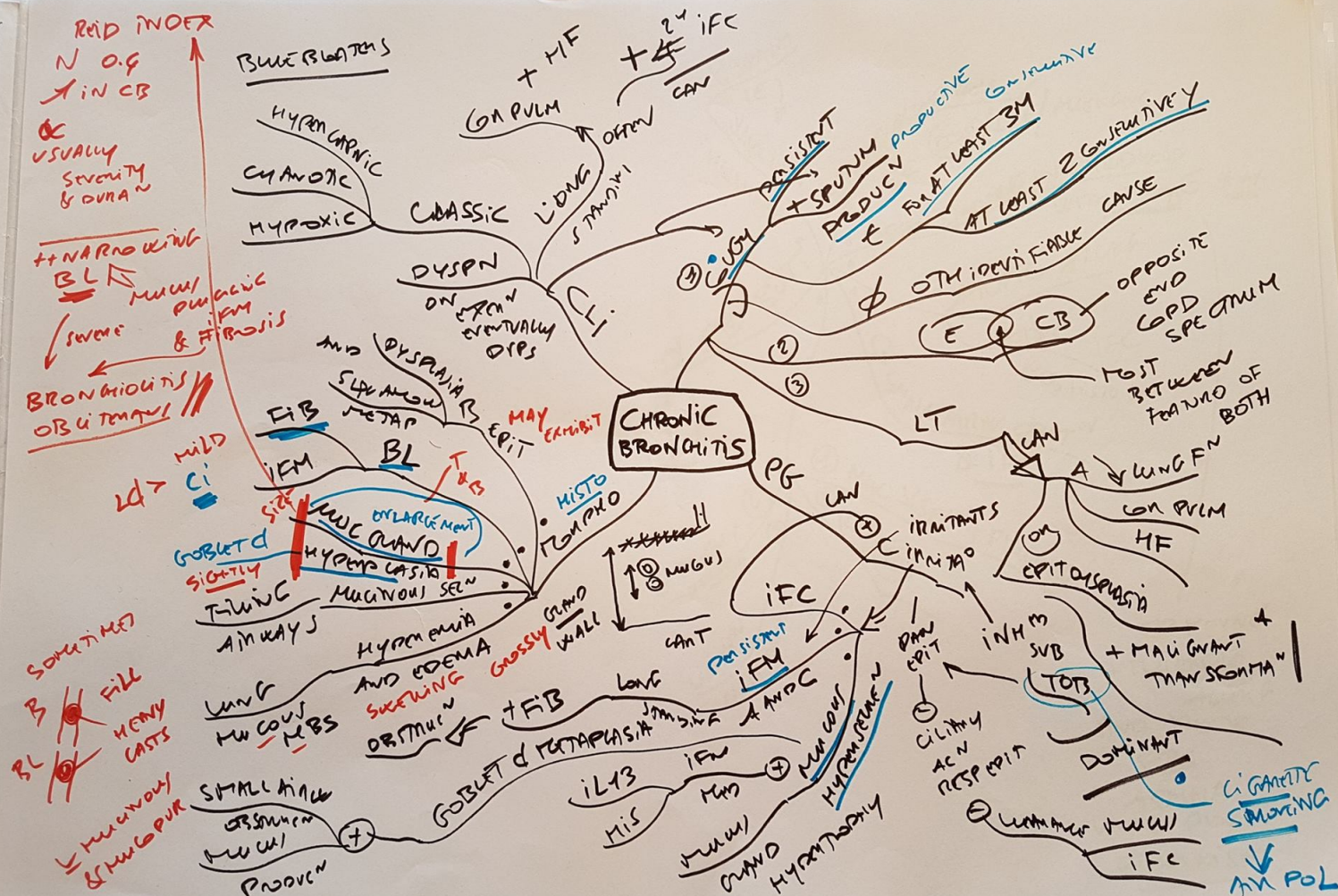
CB

Notion

• INHIBITS
 • POLLUTION
 • CIGARETTES
 • CHRONIC COUGH
 • CAN CAUSE → ENDOS ★
 • BACUS $\propto$ SEC^N / EARLY!
 • BAC if very intimate
 • i.e. GORGET & ↑

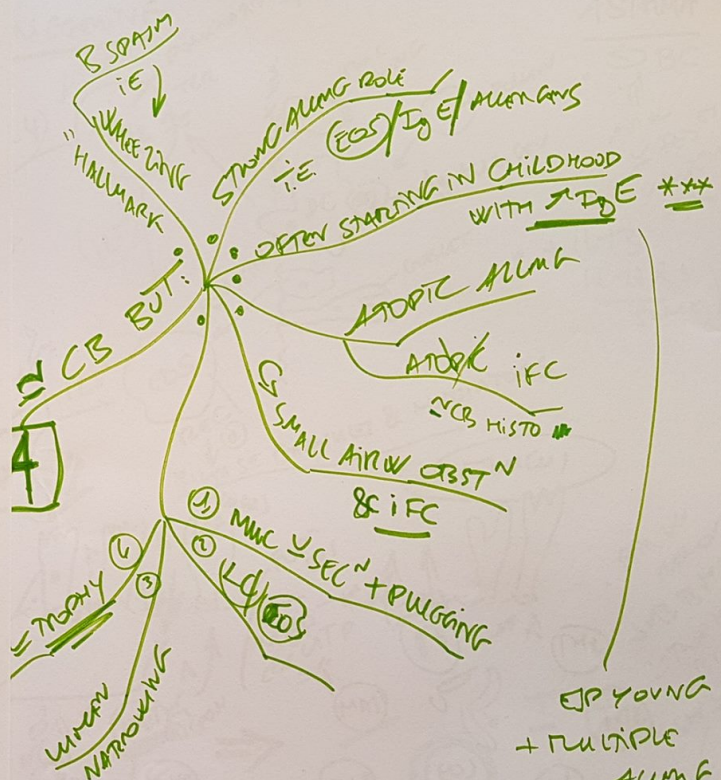
PRECURSOR





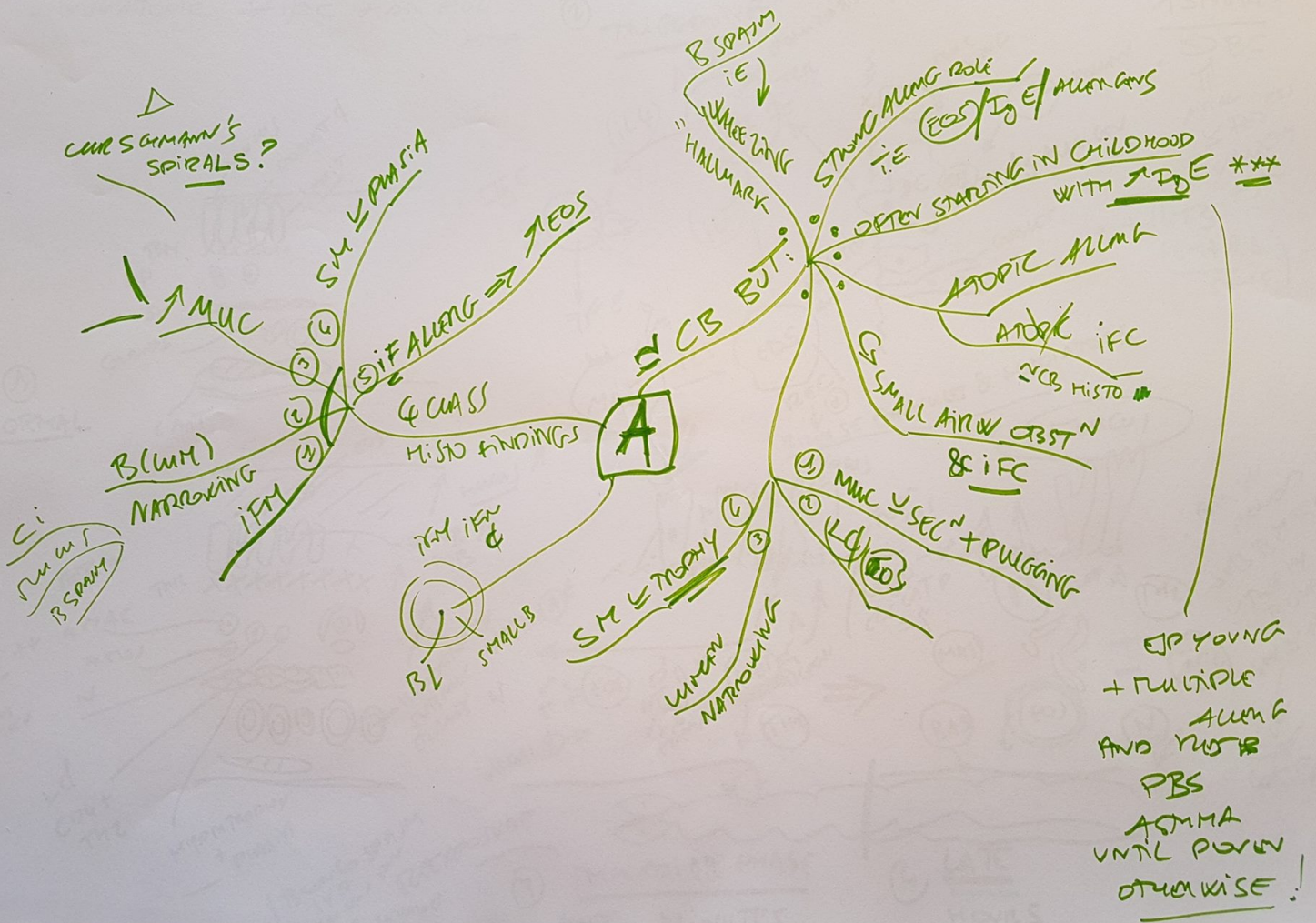
A hand-drawn diagram of a neuron. The cell body is labeled 'CELL BODY'. Branching out from the cell body are 'DENDRITES'. A long 'AXON' extends from the cell body, covered by a 'MYELIN SHEATH'. The axon ends in 'AXON TERMINALS'.

ASTHMA

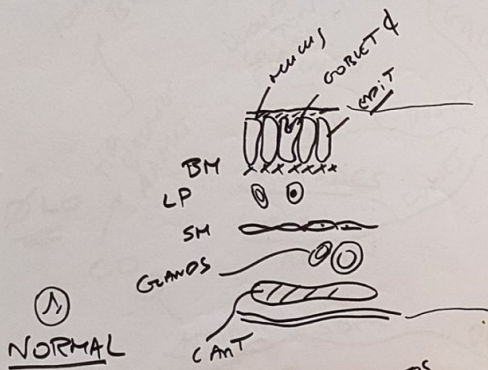


EJP YOUNG
+ MULTIPLE ALLERG
AND NOT
PBS
ASTHMA
UNTIL PROVEN
OTHERWISE!

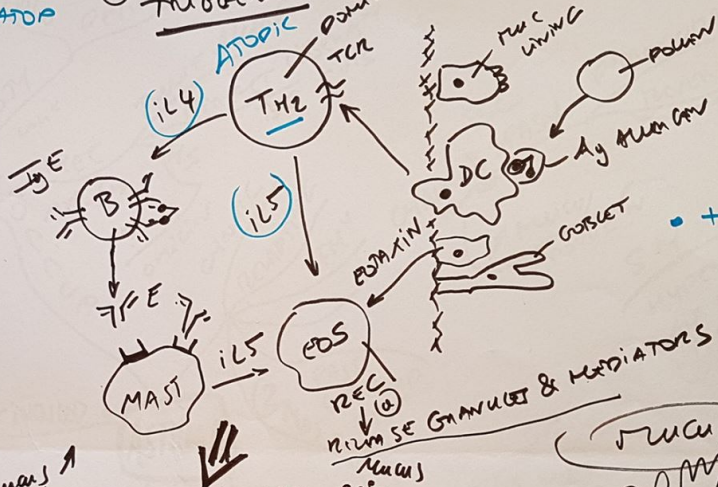
△ CURSCHMANN'S SPIRALS?



• NONATOPIC + IEC + AM POL
 ↳ ATOP

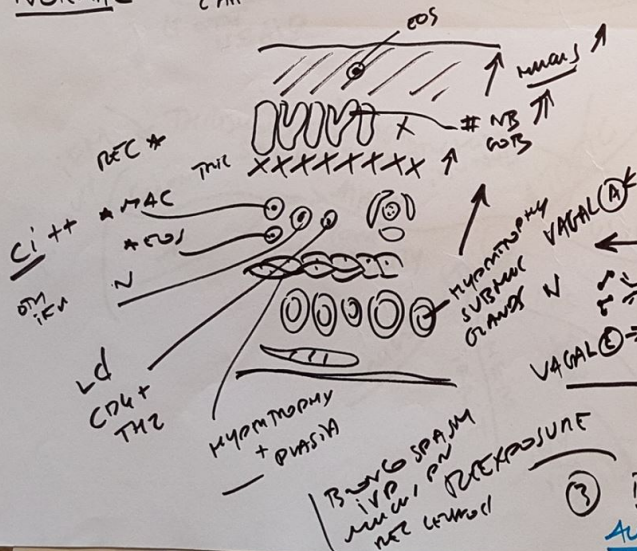


② TRIGGERING
ATOPIC dominant



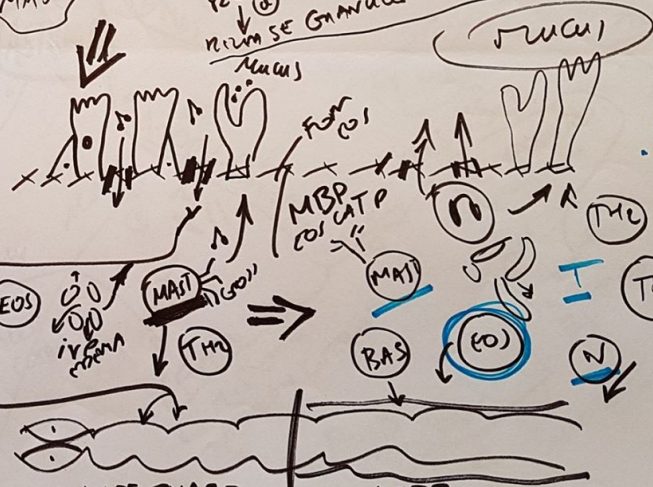
ASTHMA

• SBC
 ↑ AMW
 ↓ RES
 ↓ ANGIO
 ↓
 • + IL13
 IL17 & 9
 (some)

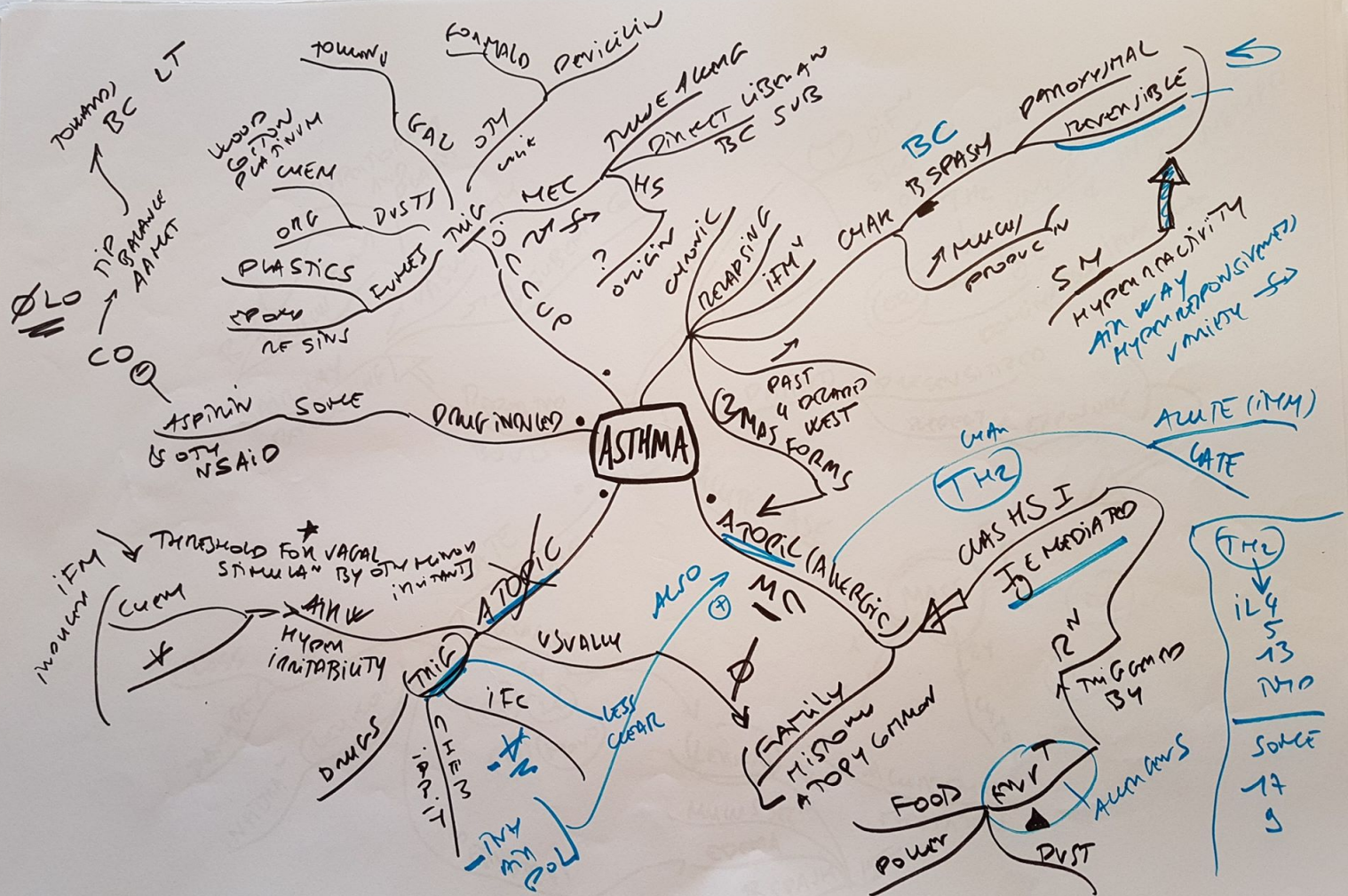


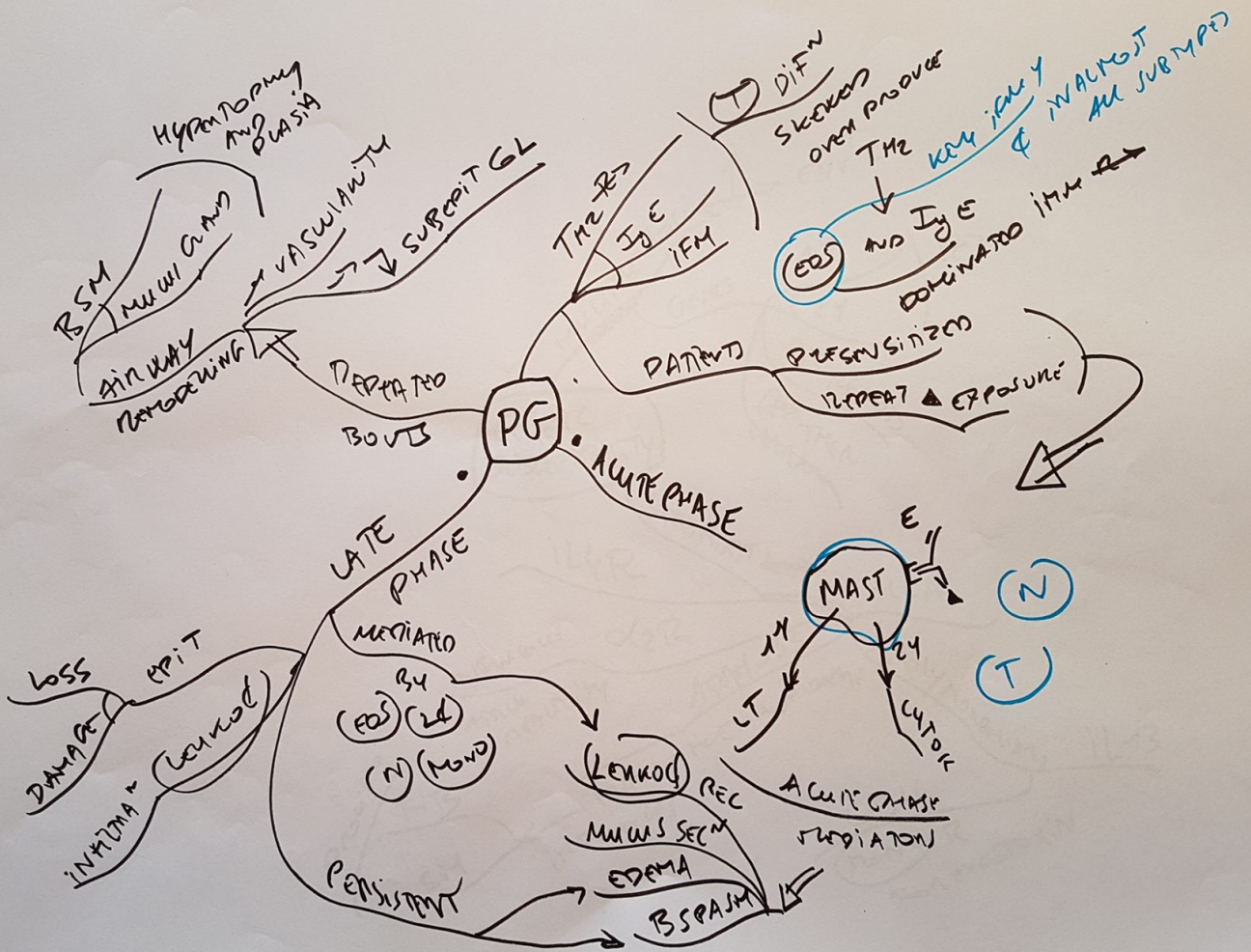
③ IMMEDIATE PHASE
ACUTE MINUTES

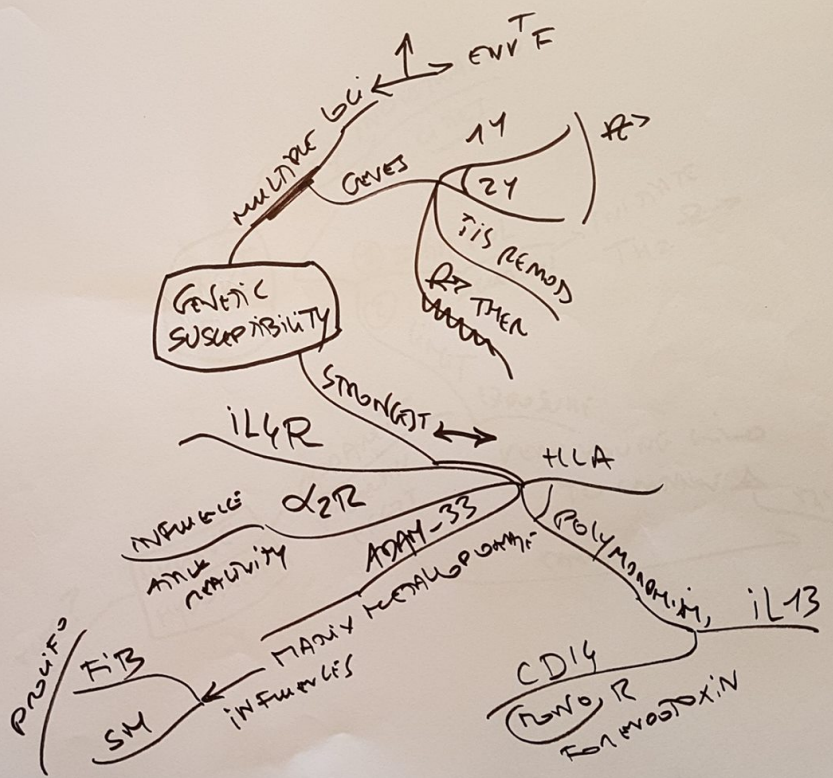
④ LATE
 HOURS

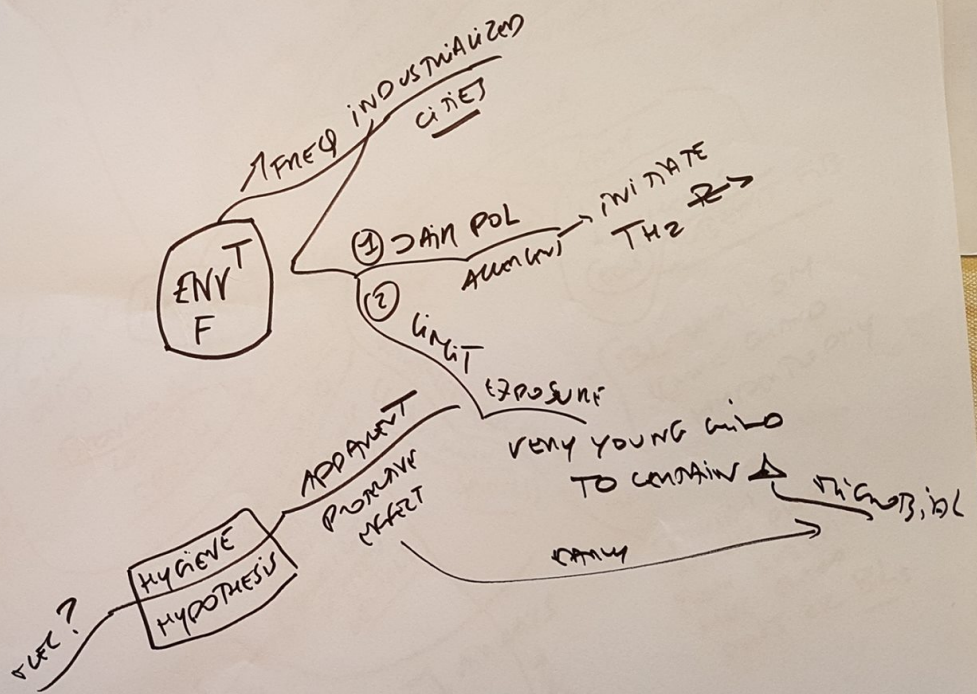


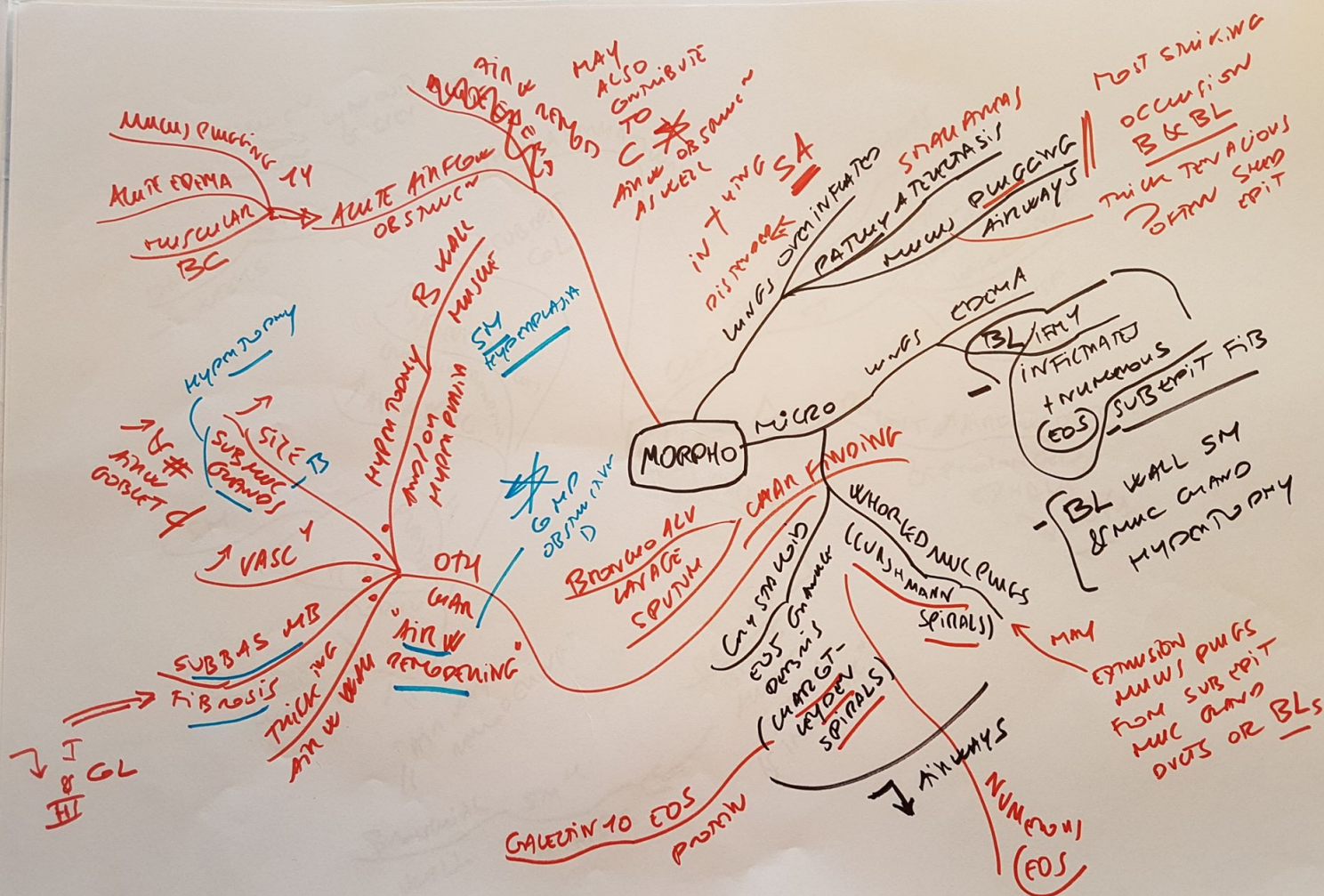
• AMW INCREASED
 SUBMUCOSAL
 DYSPLASIA
 BOWMAN'S
 SM = PLASMA
 ↓
 GMP

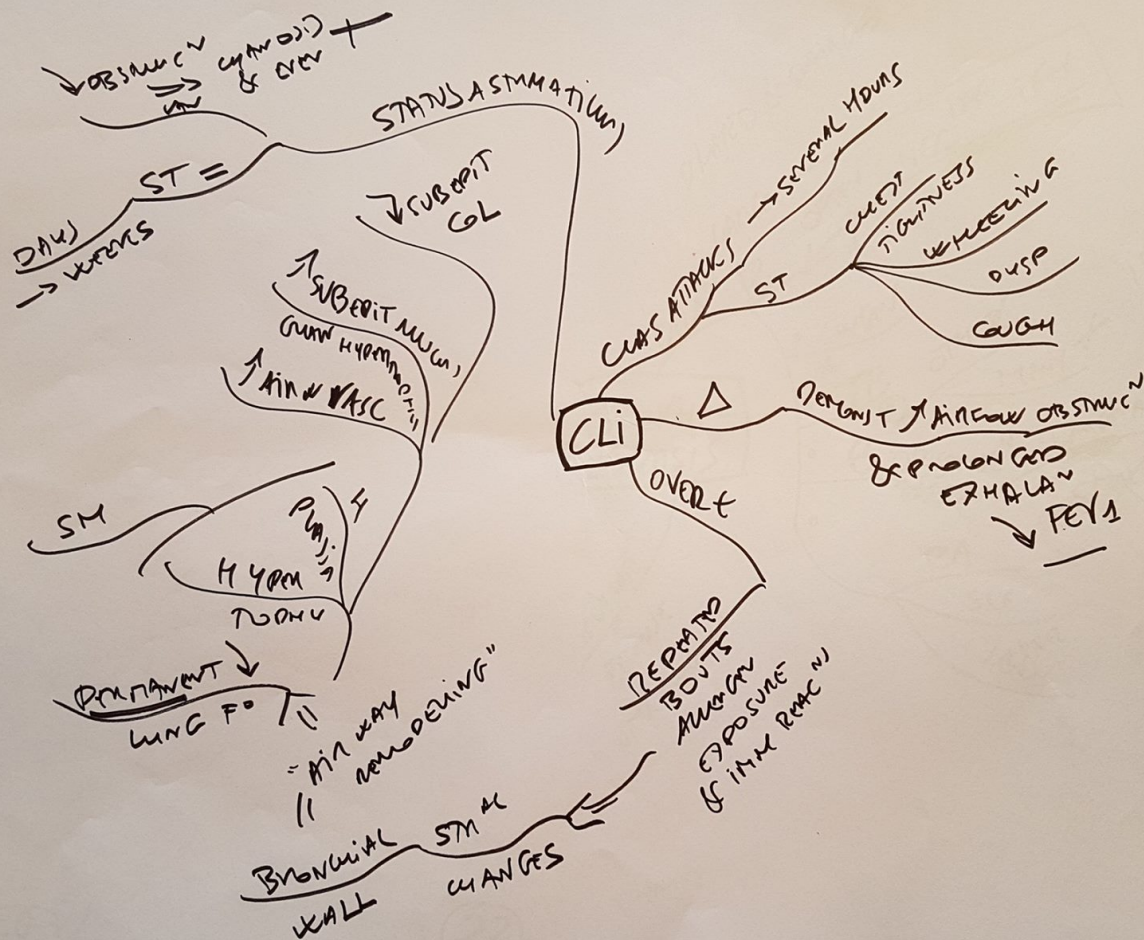


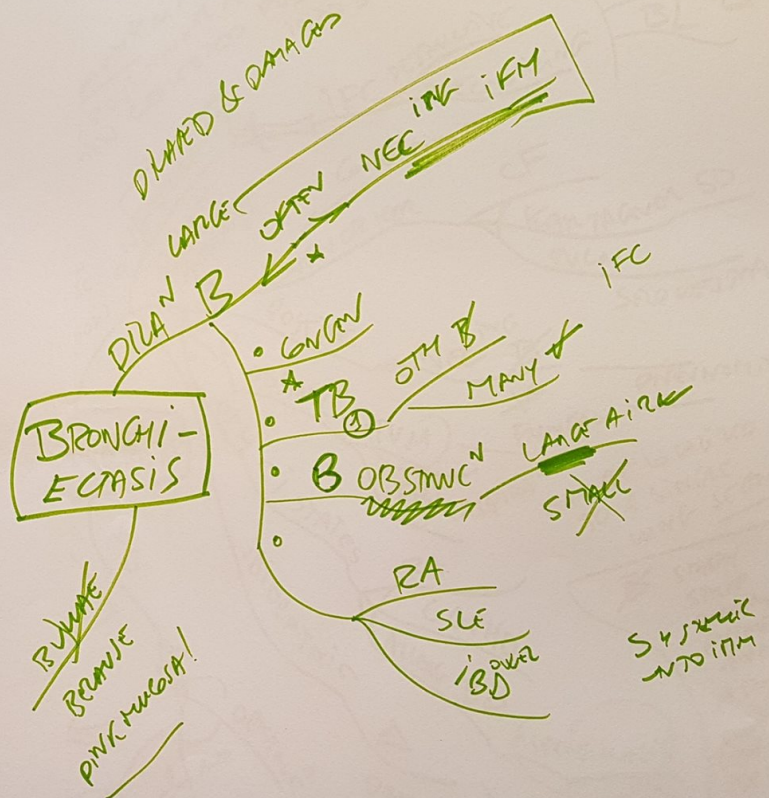


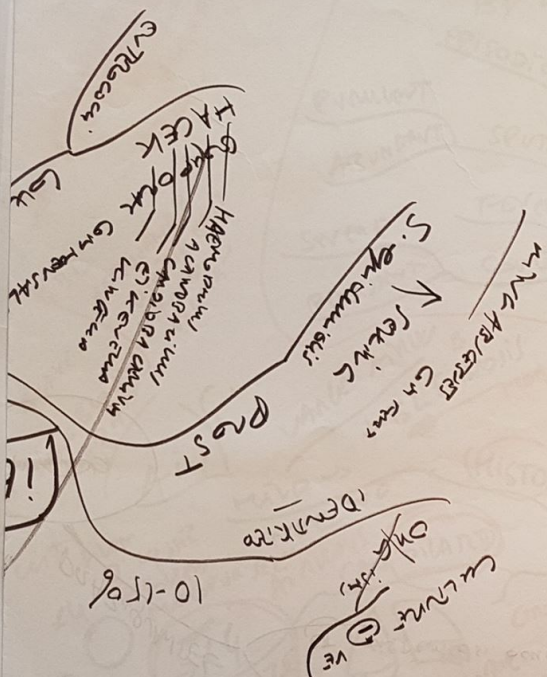




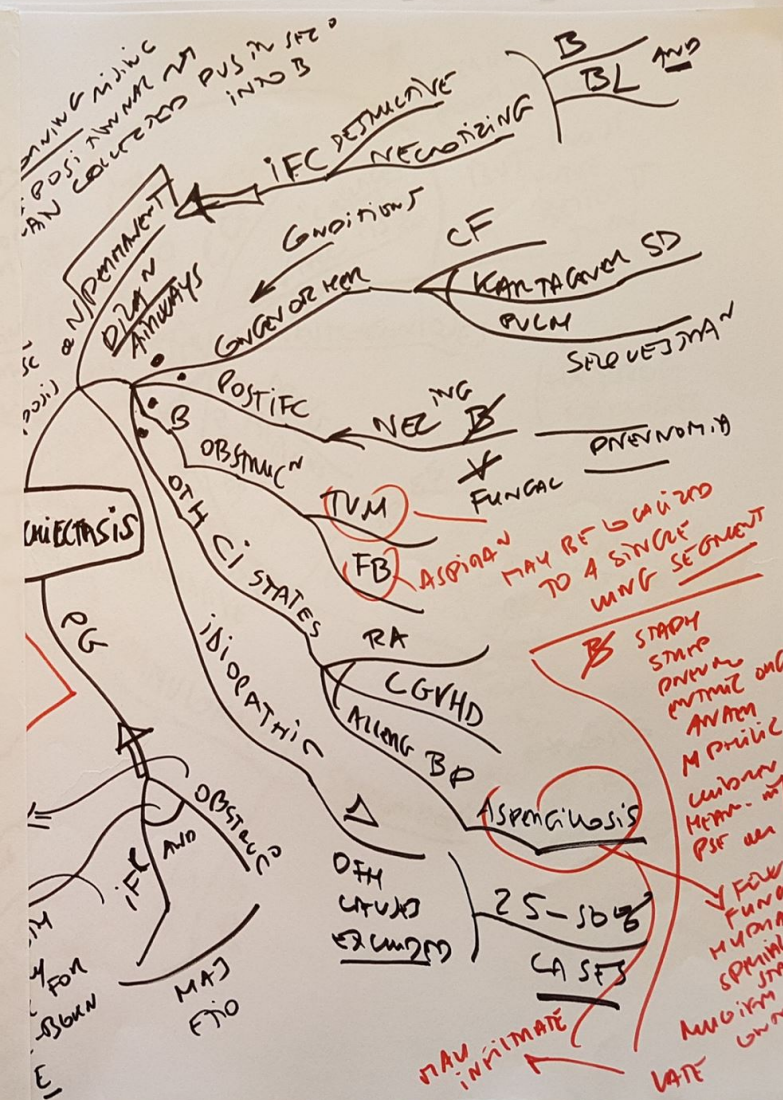


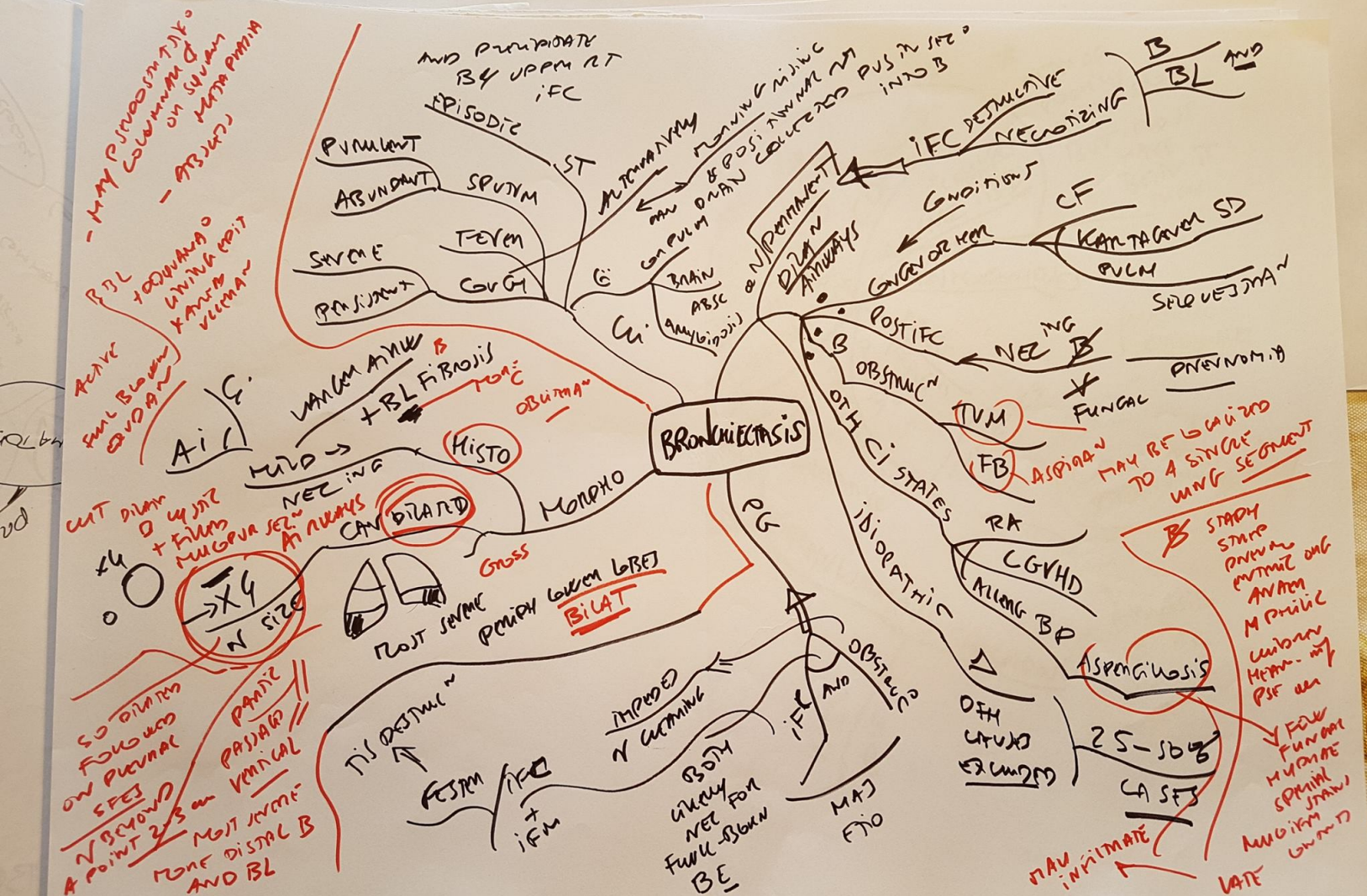




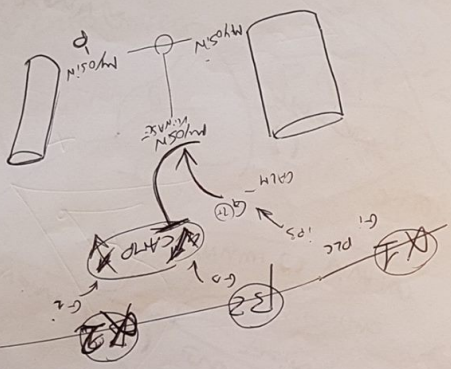


BRONCHIECTASIS

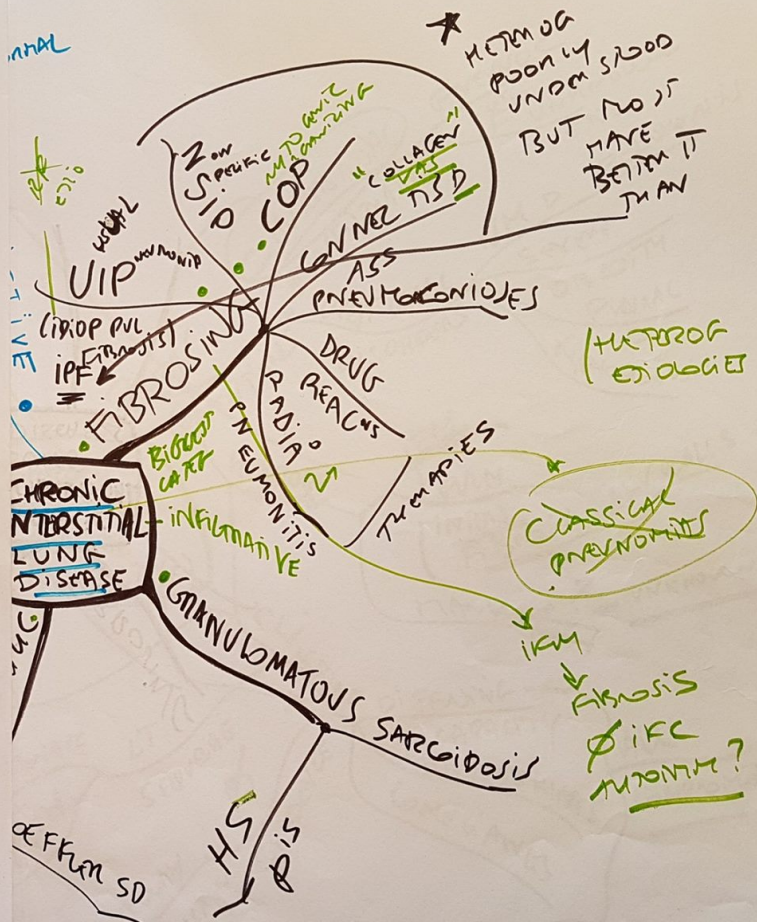


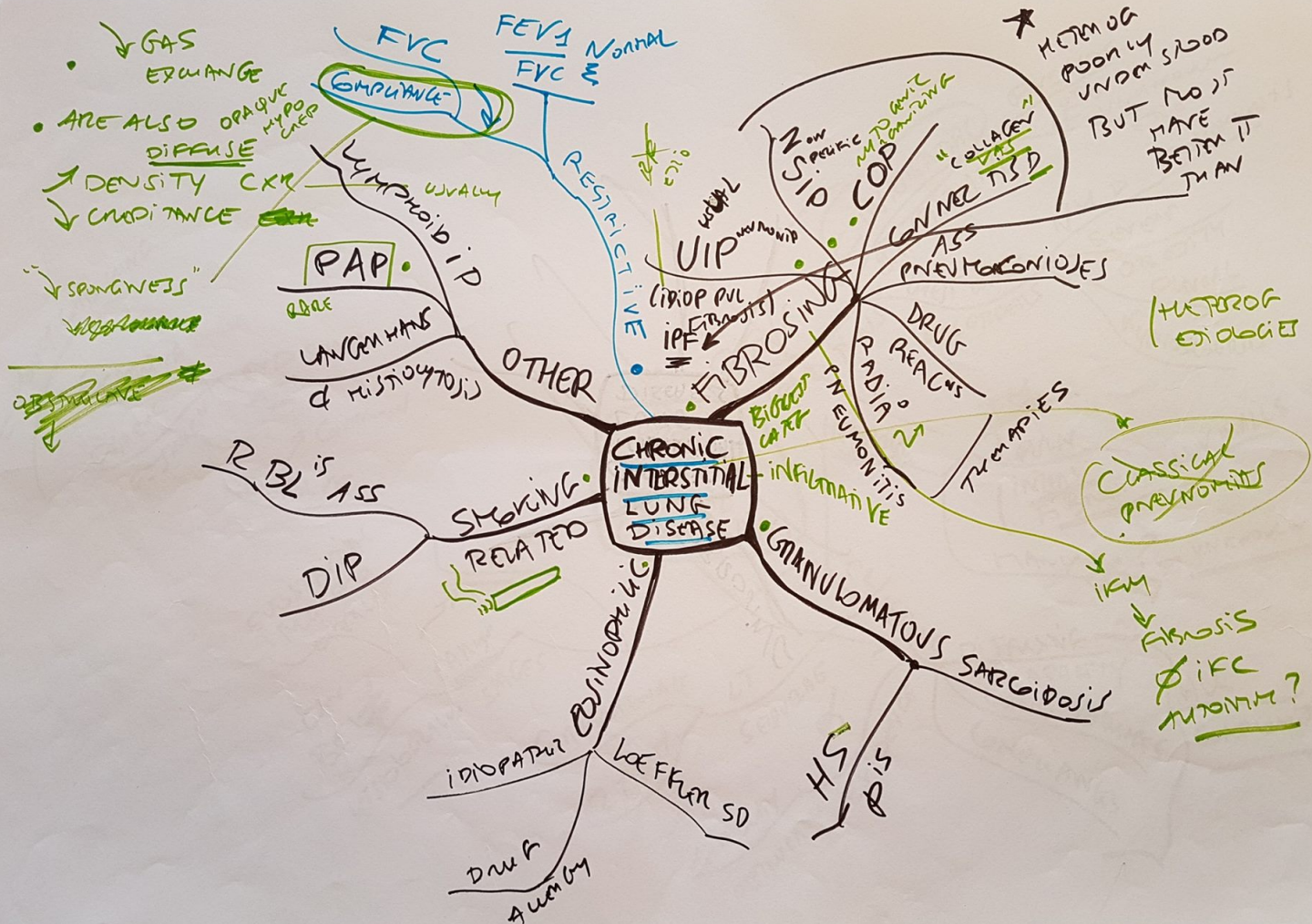


12/03/11



RESTRICTIVE





= HONEY COMB LUNG

SCANNING
PATIENT
RESPIRATORY
END STAGE
→ GROWN
DEVELOP

SUBSTANTIAL
NON-
OVERLAP
→ MOST
EARLY
STAGES
CAN
BE
REVERSED
HISTOLOGICAL

CHRONIC
DIFFUSE
INTERSTITIAL
(RESTRICTIVE)

2 GEN
CONDITIONS

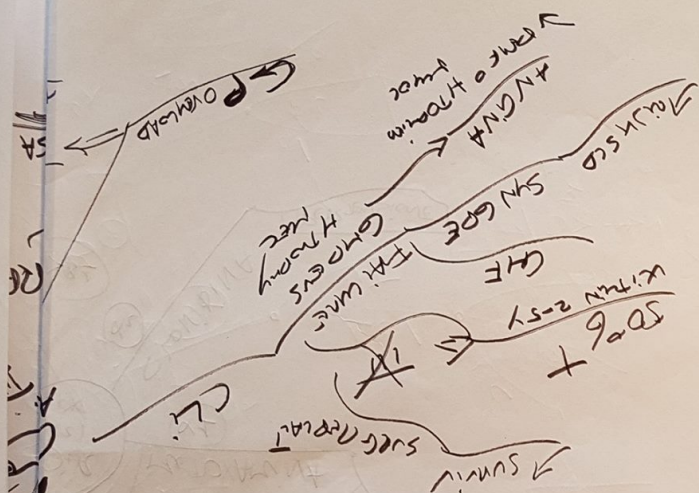
CHRONIC
INTERSTITIAL
& INFILTRATIVE
PNEUMONITIS
IF UNKNOWN
ETIO
POLYMYOSITIS
NM D
SCLERODERMA
OBESITY
PULMONAL
D
KIDNEY DISEASE

HETEROGENEOUS
IFM
PULM
INTERSTITIAL
FIBROSIS
ALV WALLS
MANY
? UNKNOWN

CLINICAL

DIFFUSING
CAPACITY
LUNG VOLUMES
COMPLIANCE
ALL
CHRONIC

GRAFT-VERSUS
HOST
DISEASE
LT
SERUM
ANTIBODIES
AIRWAY
OBSTRUCTION
EVIDENCE



FIBROSING

• idiopathic = NOT FROM ANY USUAL CAUSES
like lupus /
scleroderma

aplasia

given col

imm Hct

• PE
• IP

SCAR $\leftarrow$ Tri and Me-
GIVEN Cd SPAIN

CRPD
vnlke GPD
Share → COMPLIANCE!

• IDIOPATHIC = NOT FROM ANY USUAL CAUSE
LIKE UIP / SCLERODERMA

• FIBROSIS

IPF
UIP

SCAR ++

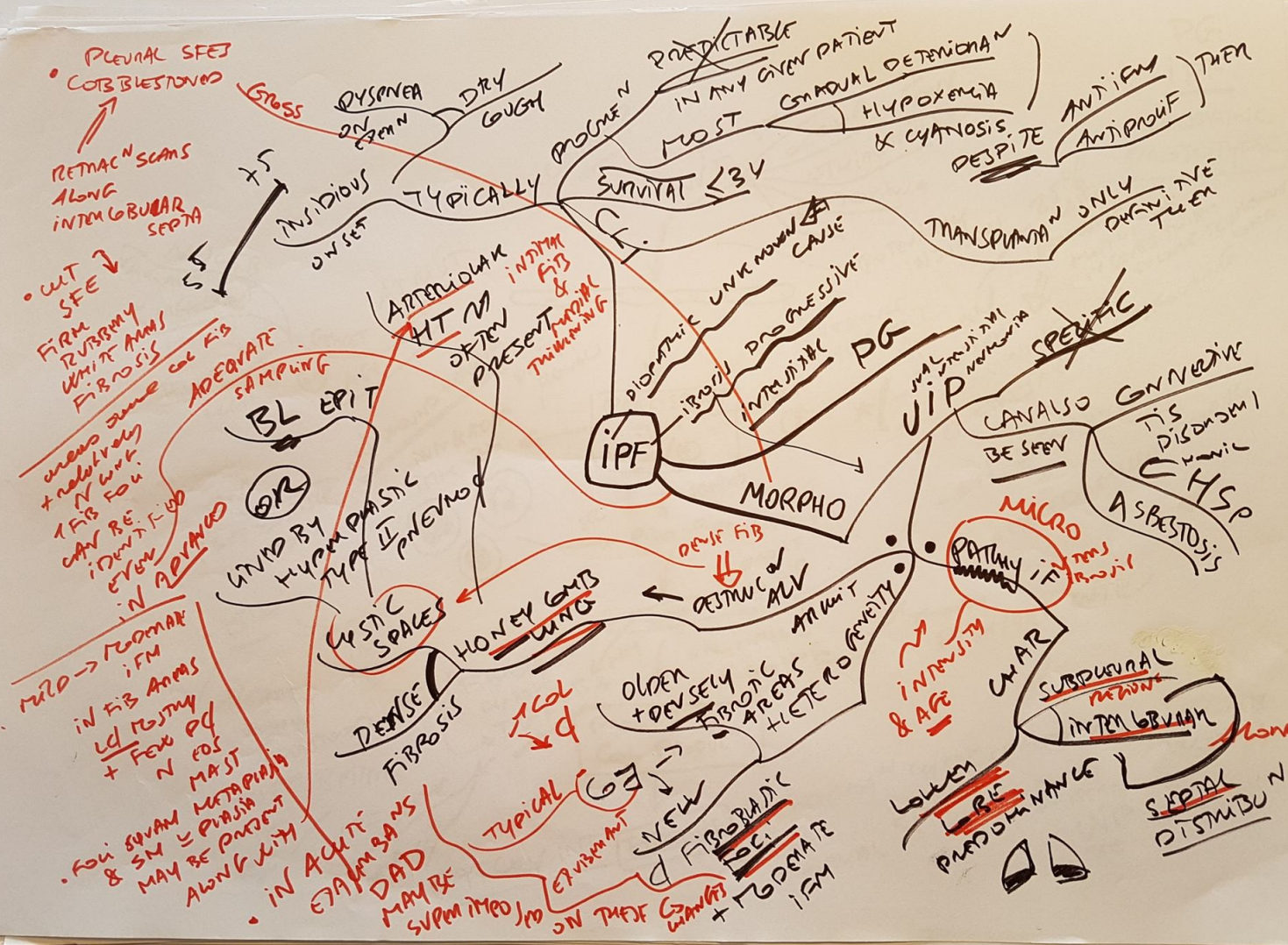
GREEN
GL

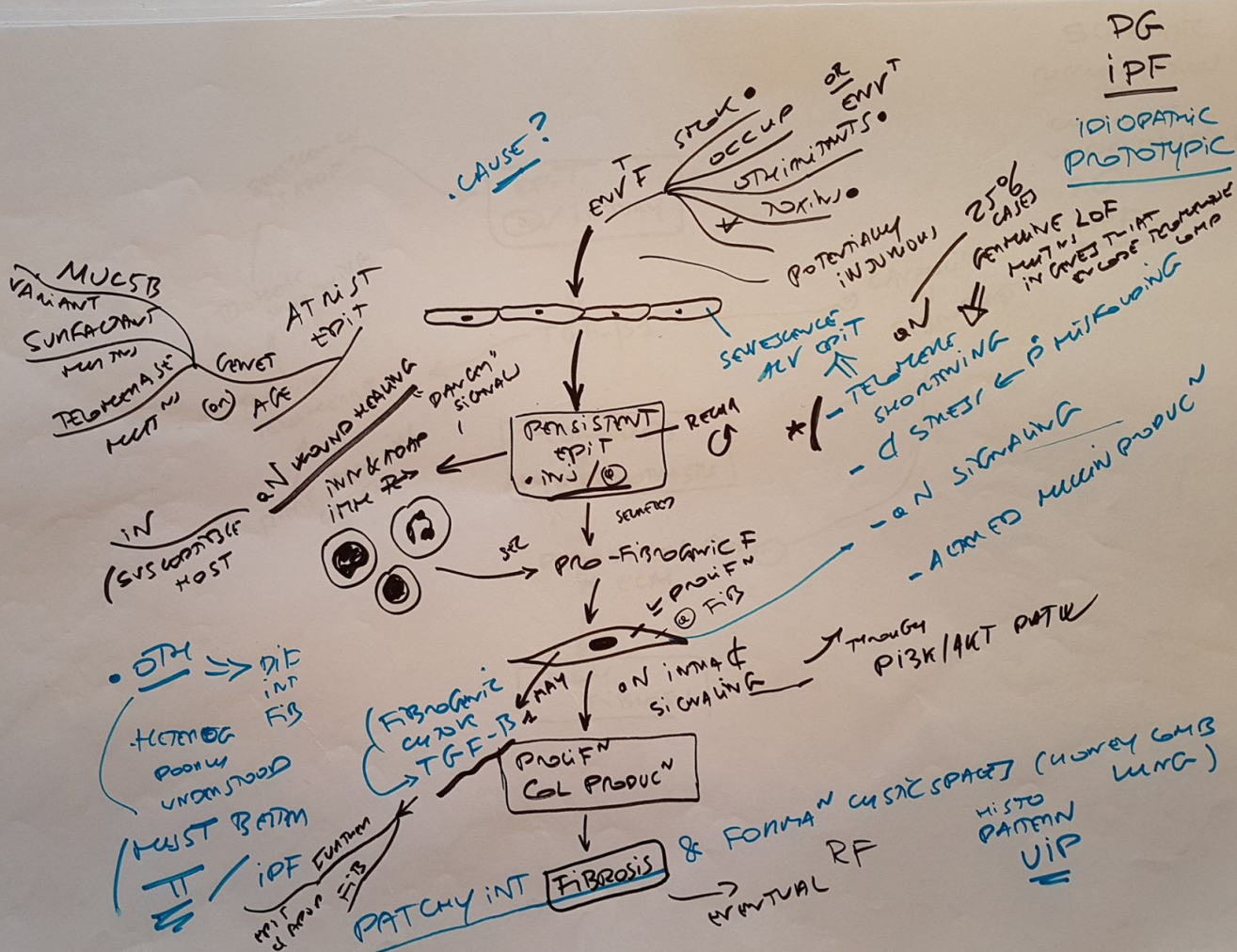
← THIN AND ME
STAIN

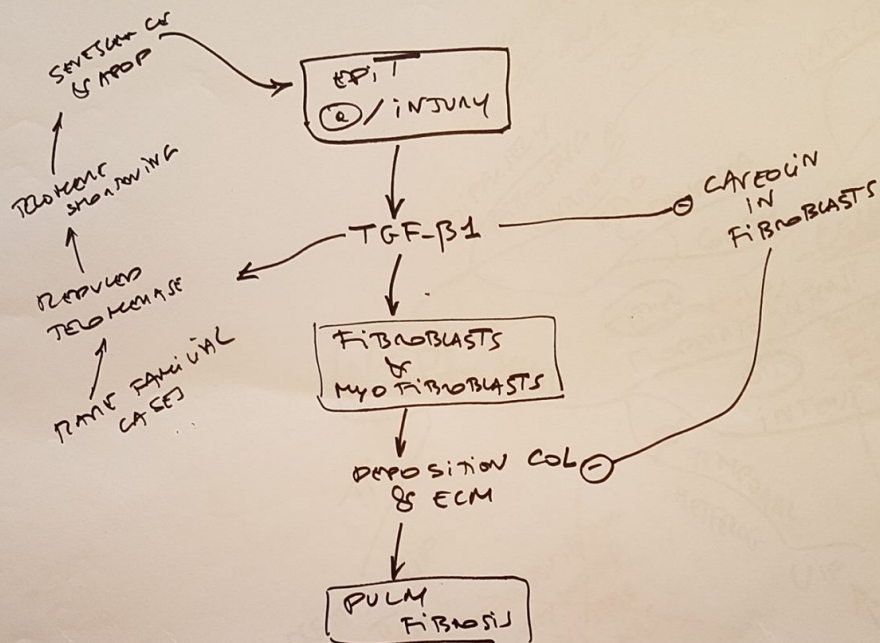
CRPD

UNLIKE COPD
SHAR

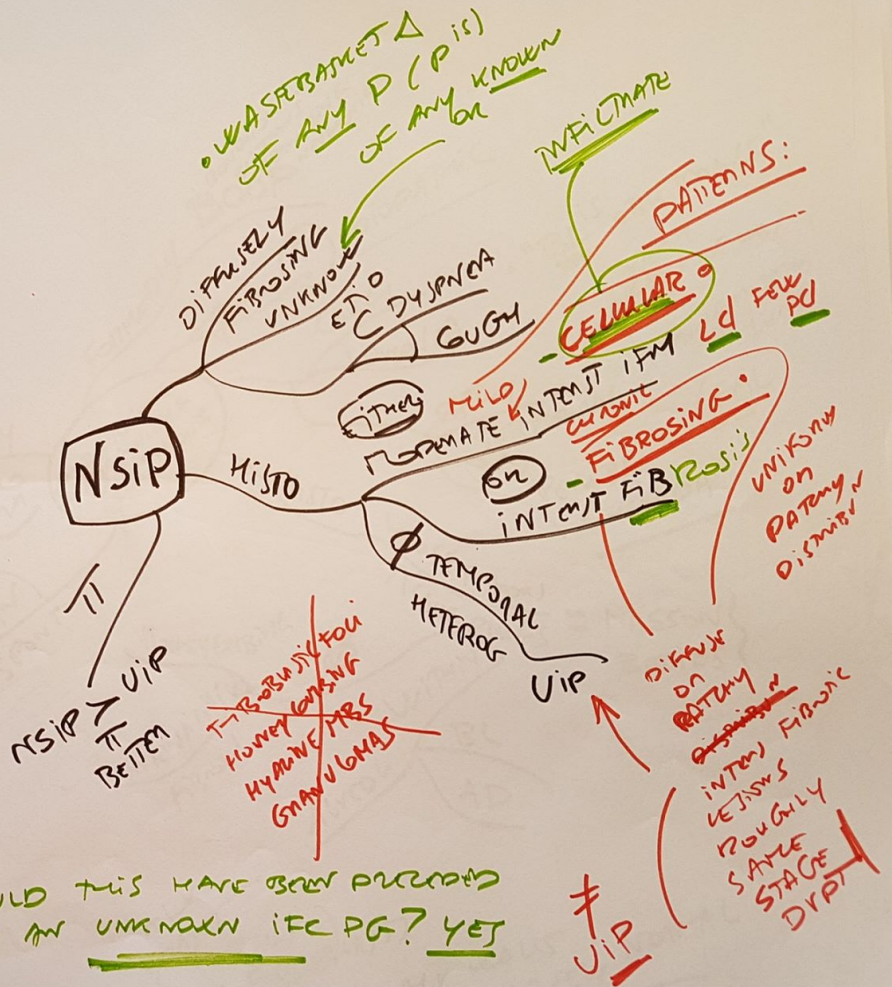
→ COMPLIANCE!

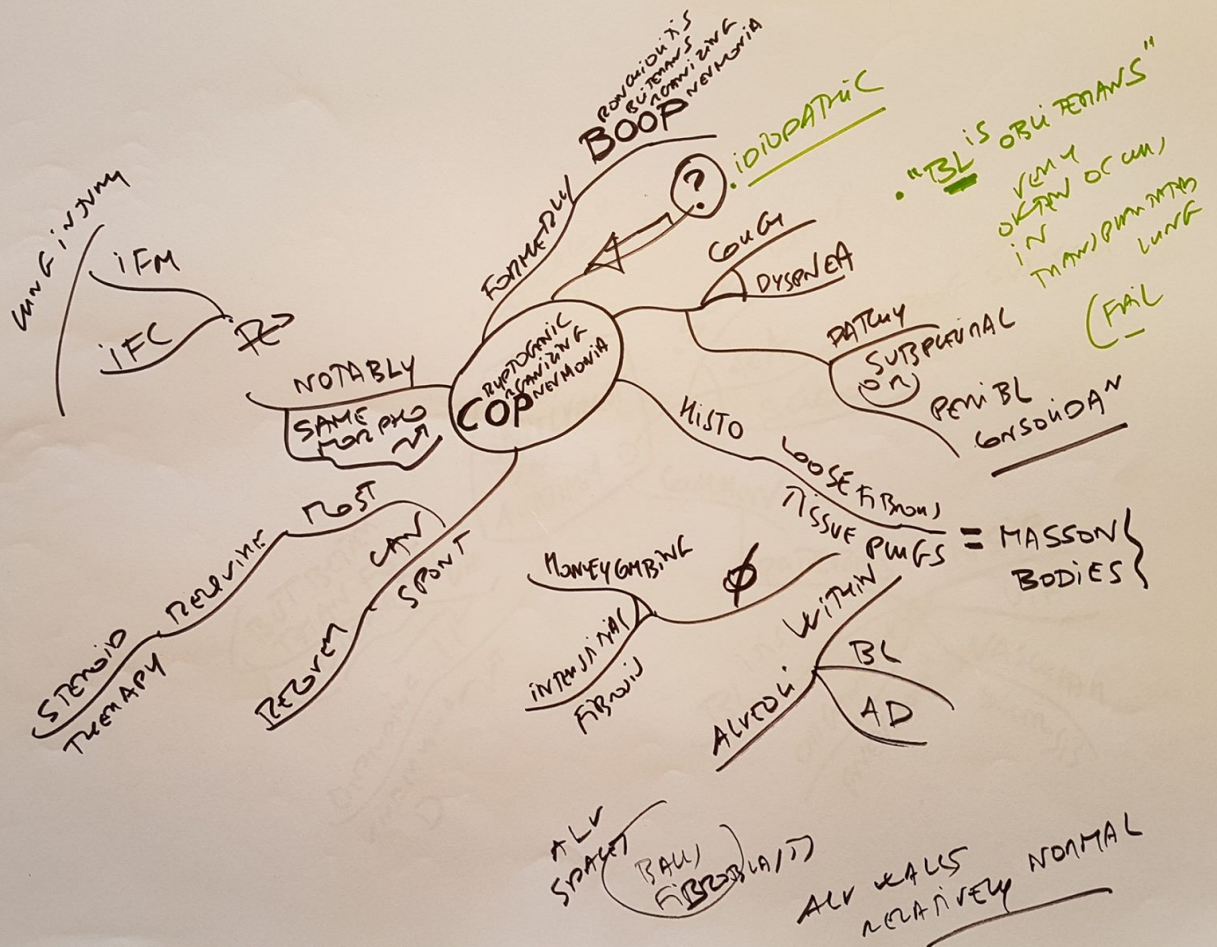


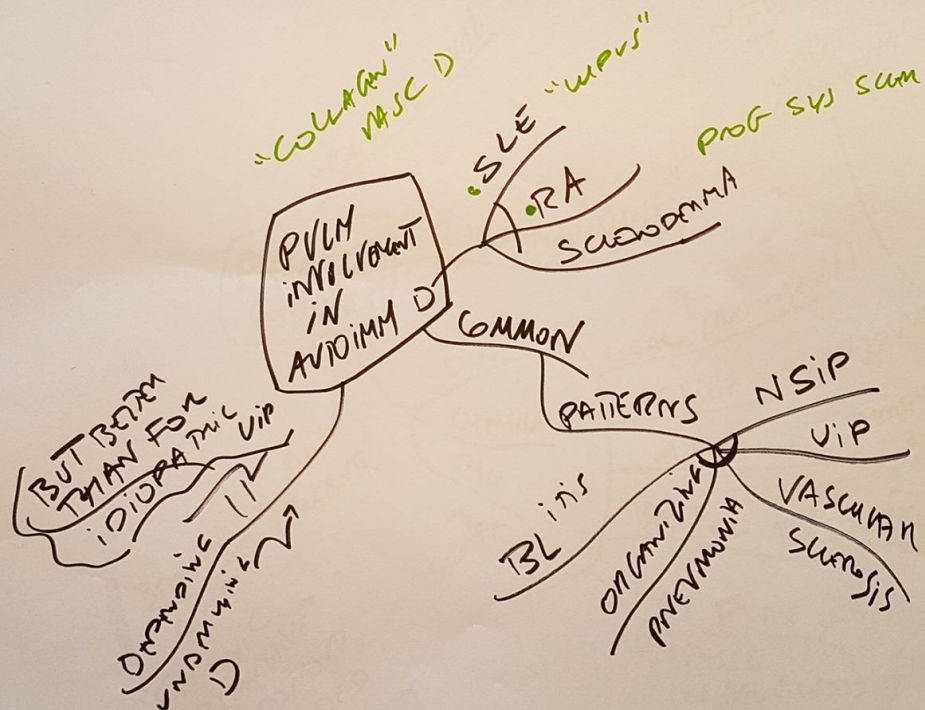


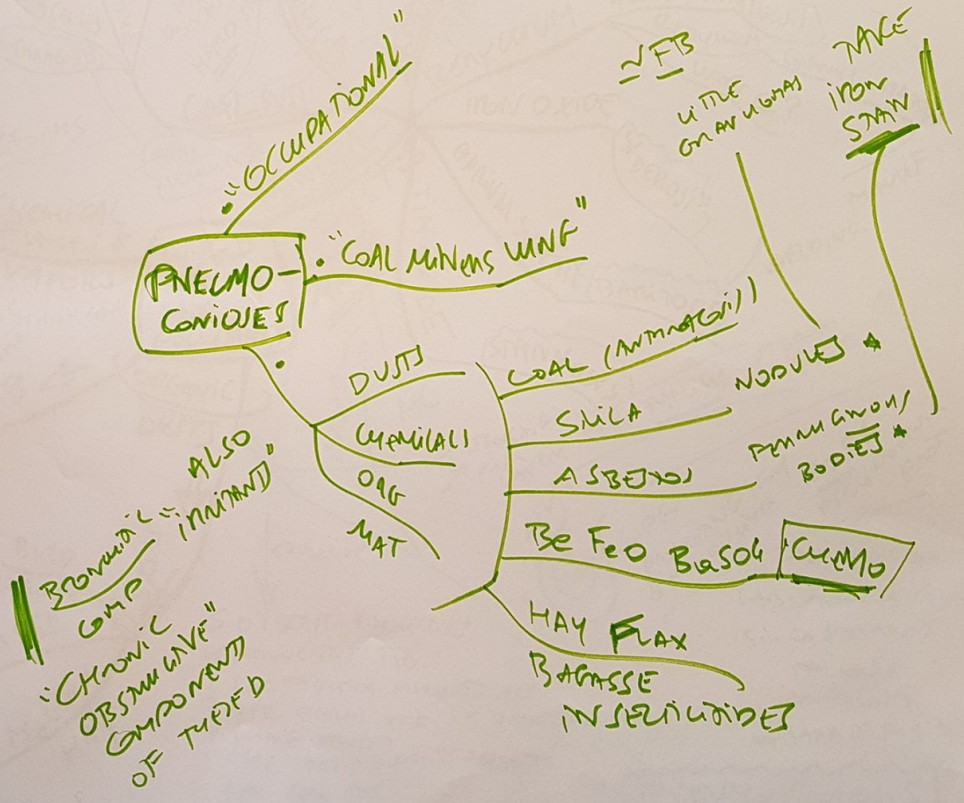


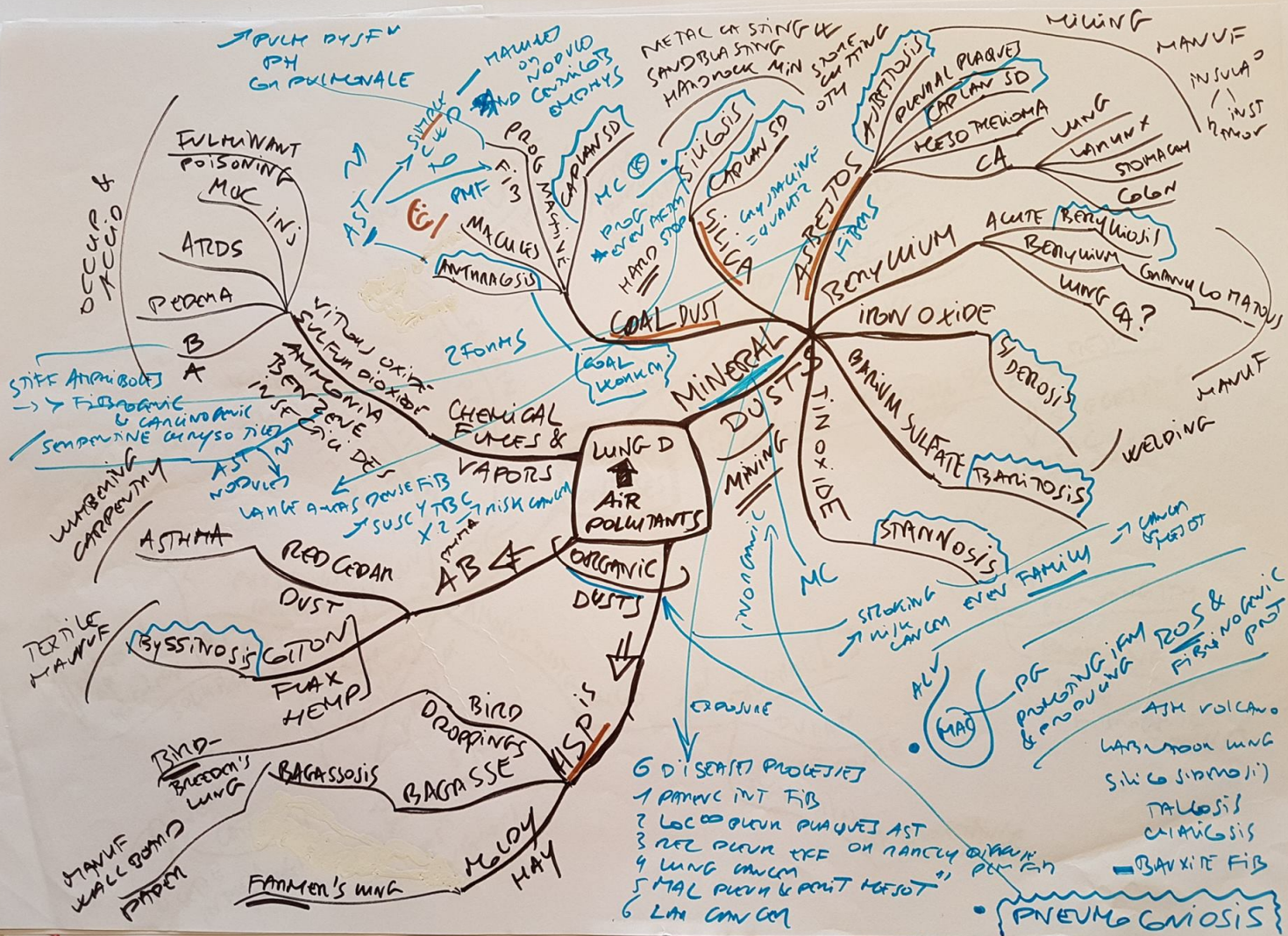
SCHEMATIC
REPRESENTATION
OF
CURRENT
UNDERSTANDING
OF
IPF





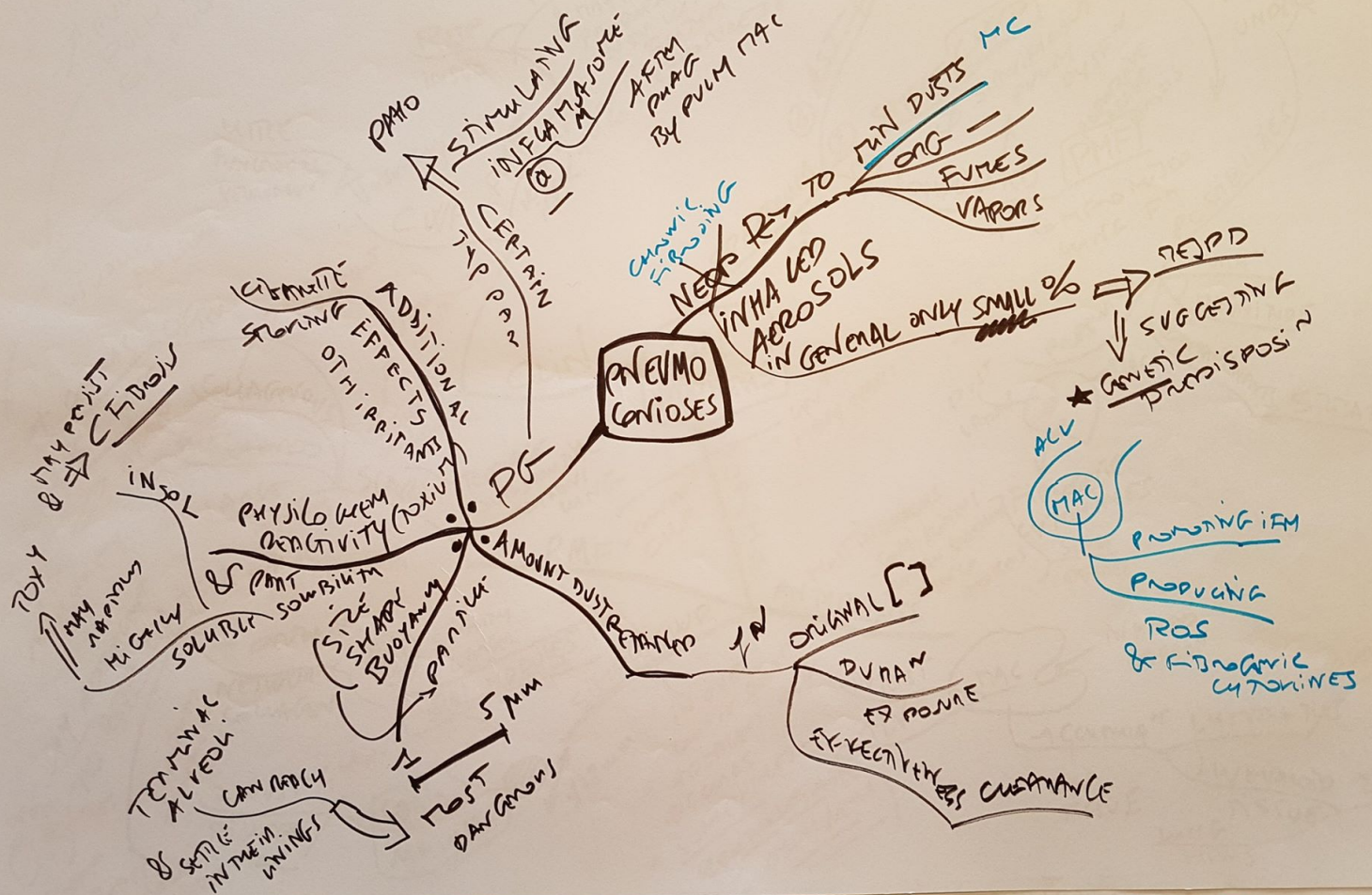


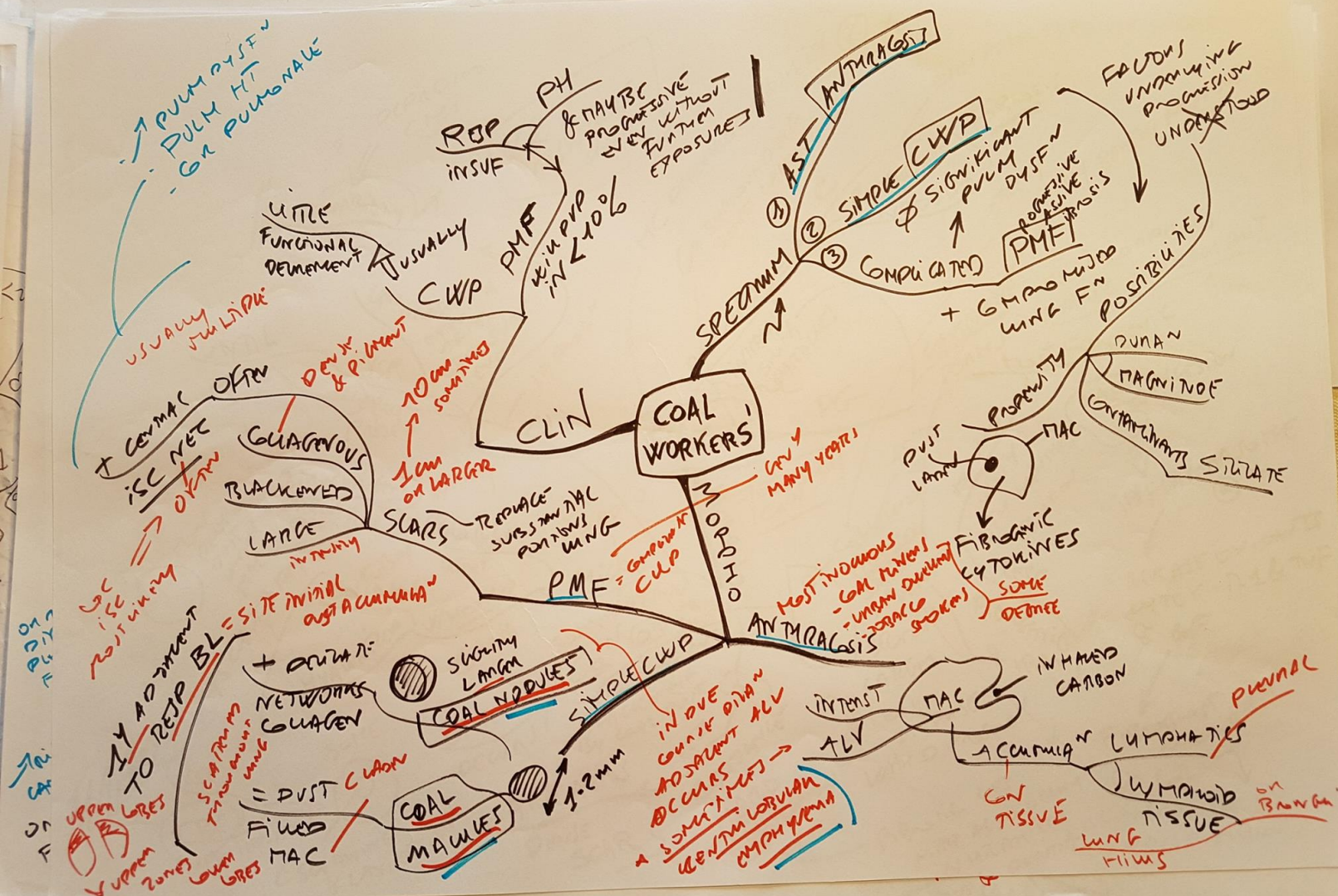


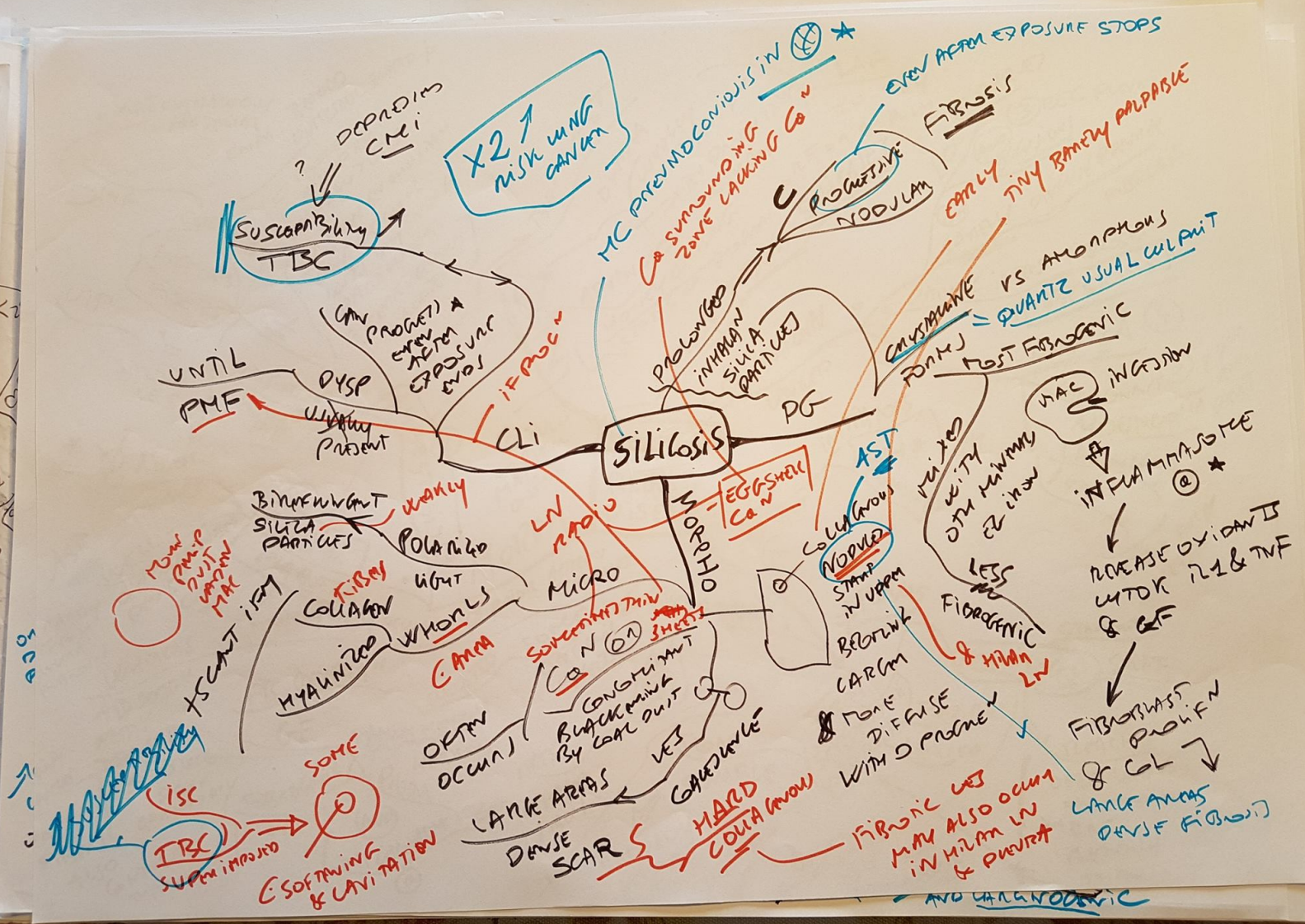


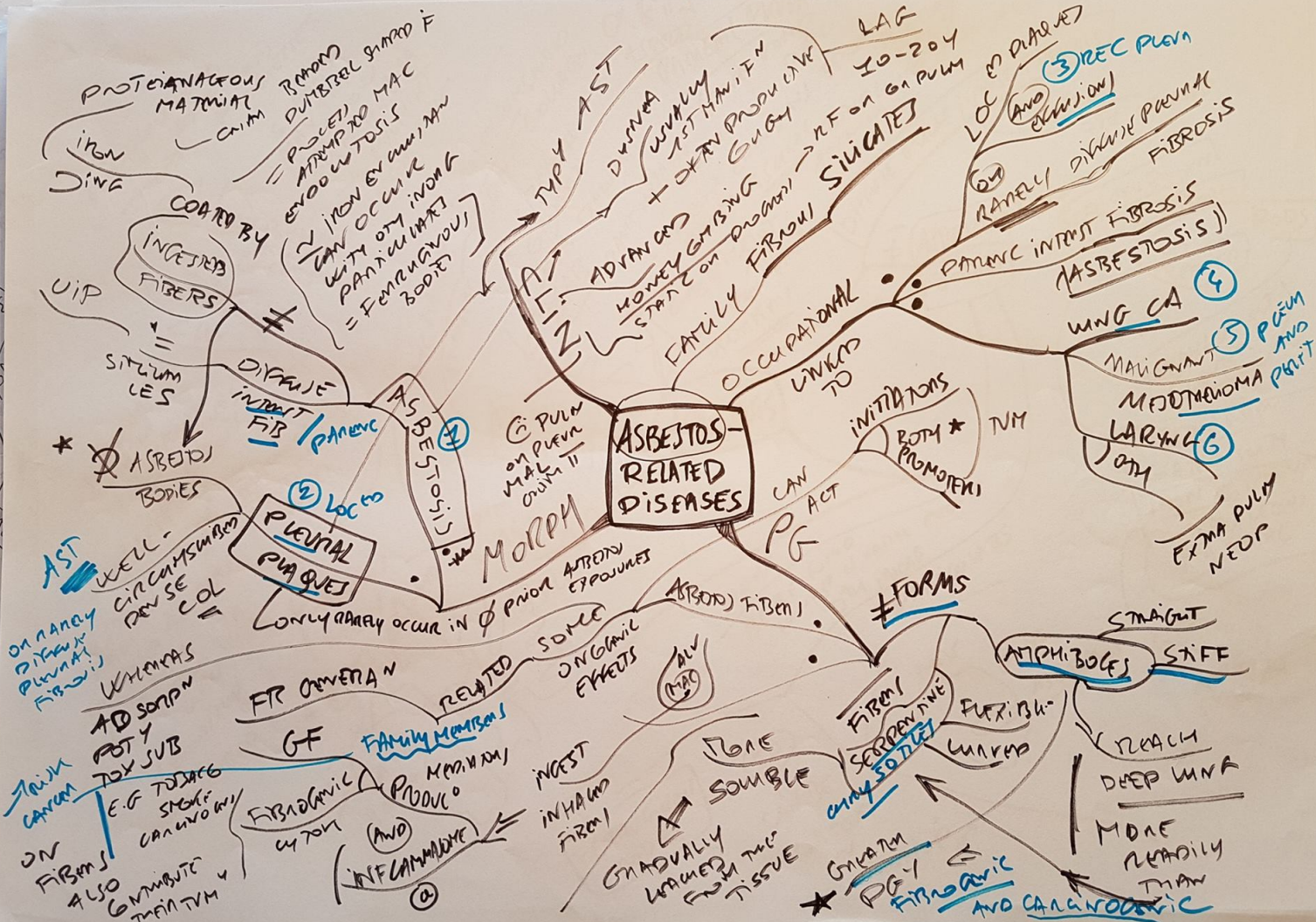
- 6 DISEASES PRODUCED BY
- 1 PNEUMONITIS
 - 2 LOCAL PLEURAL PLAQUES
 - 3 ACUTE PLEURAL EFFUSION
 - 4 LUNG CANCER
 - 5 MALIGNANT PLEURAL MESOTHELIOMA
 - 6 LAMINAR COLLAPSE

PNEUMOCYTOSIS









MURDERER
 AS FIBROSIS
 PROPERTIES
 SCANNING
 MAY TRAP
 N AMO & AA
 PULM AA & AA
 PULM HT
 & GA PULM

BEING
 SUBPULVAC

SILENCE
 CK

FIBROSIS
 FOCAL
 FIBROSIS
 NUMEROUS
 ALVEOLAR
 BODIES

ZIP

DISTORTION
 ANCHOR
 THICK
 TUBER
 YELLOW
 HONEYCOMBED

FIBROSIS
 BEING
 AND
 EXTENT
 ASB
 ALV

MECHANISM
 VERY UNCERTAIN
 SIZE & #
 GARNER
 VESICULAR
 * ASB
 AMT WITH NO
 EXPOSURE
 * UNCL
 PART VISUAL
 ASB & FIBROSIS
 PULM HT
 WORKING

PULVAC
 PLAQUE

ASBESTOS
 PANDEAL (PULVAC)
 GERM POWER
 BLOOD
 TRAP
 FROM
 OTHER CAUSES

ASBESTOS

DIFUSE PULM INTERST FIBROSIS

ASBESTOS
 BODIES

GOLDEN BROWN
 FUSIFORM
 on
 SEMPER
 RODS

TRANSILUCENT
 LACERATION

ASBESTOS FIBER
 GATED WITH
 IRON CONTAINING
 PROTEIN (CDU)
 DIA TENTIAL

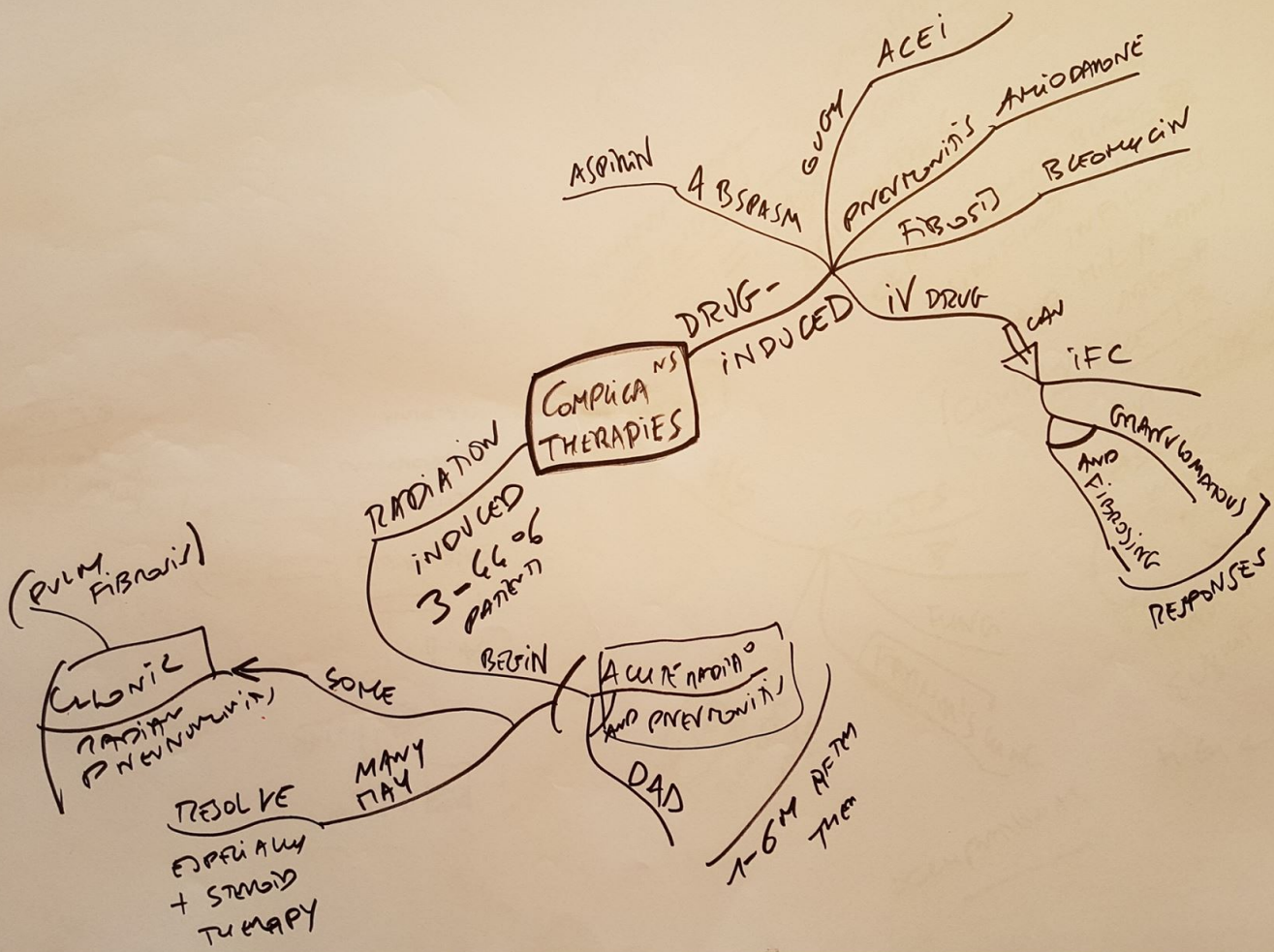
NAME
 BE BE
 UNDER
 OTHER
 PARTICULATES

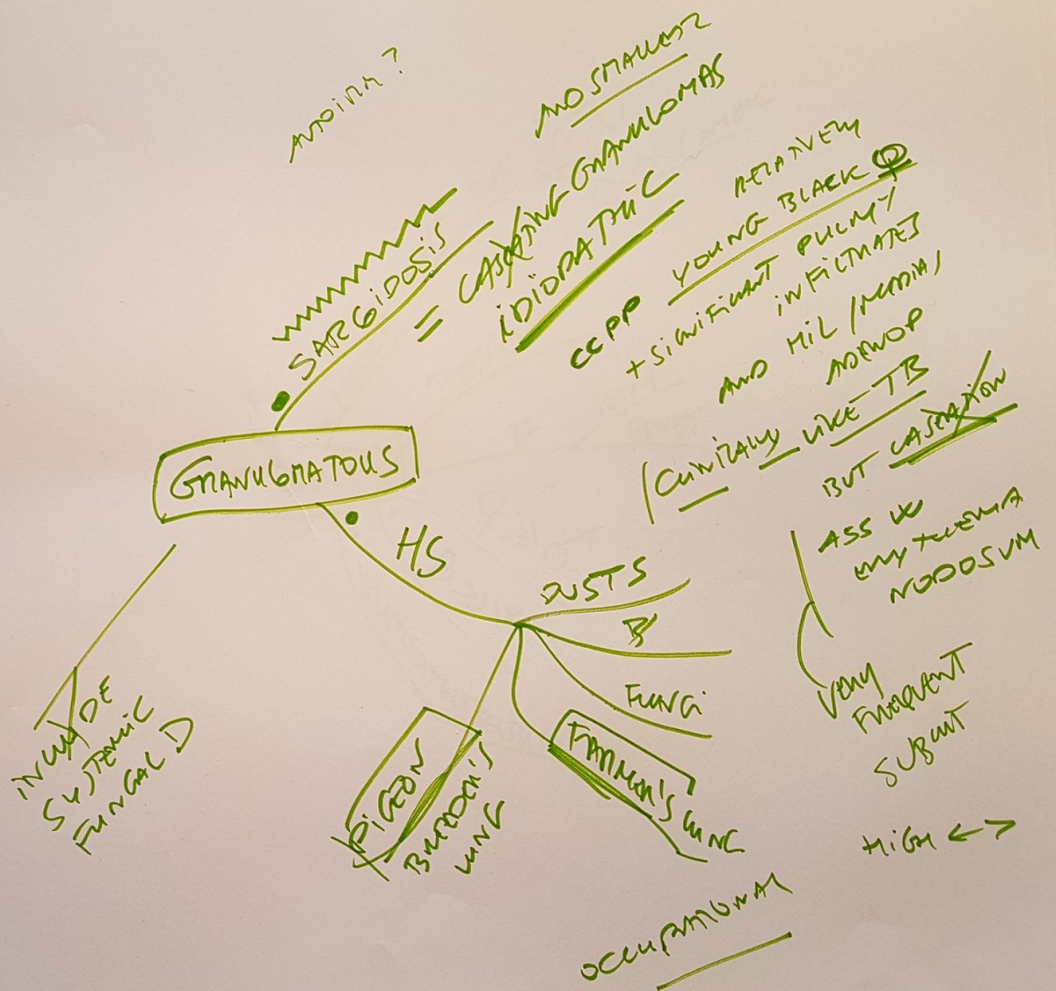
MAC
 PHAG
 ASB FIBER

PHAGOCYTES
 FIBROSIS

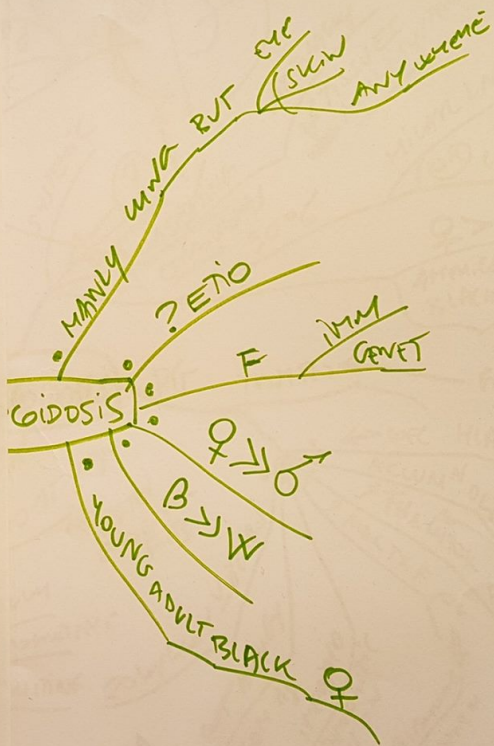
FERRUGINOUS
 BODIES

CAN BE
 GATED
 INV-P

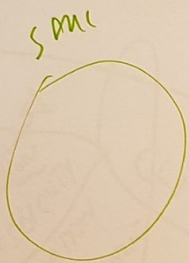
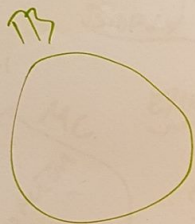




W



GRANULOMATOUS



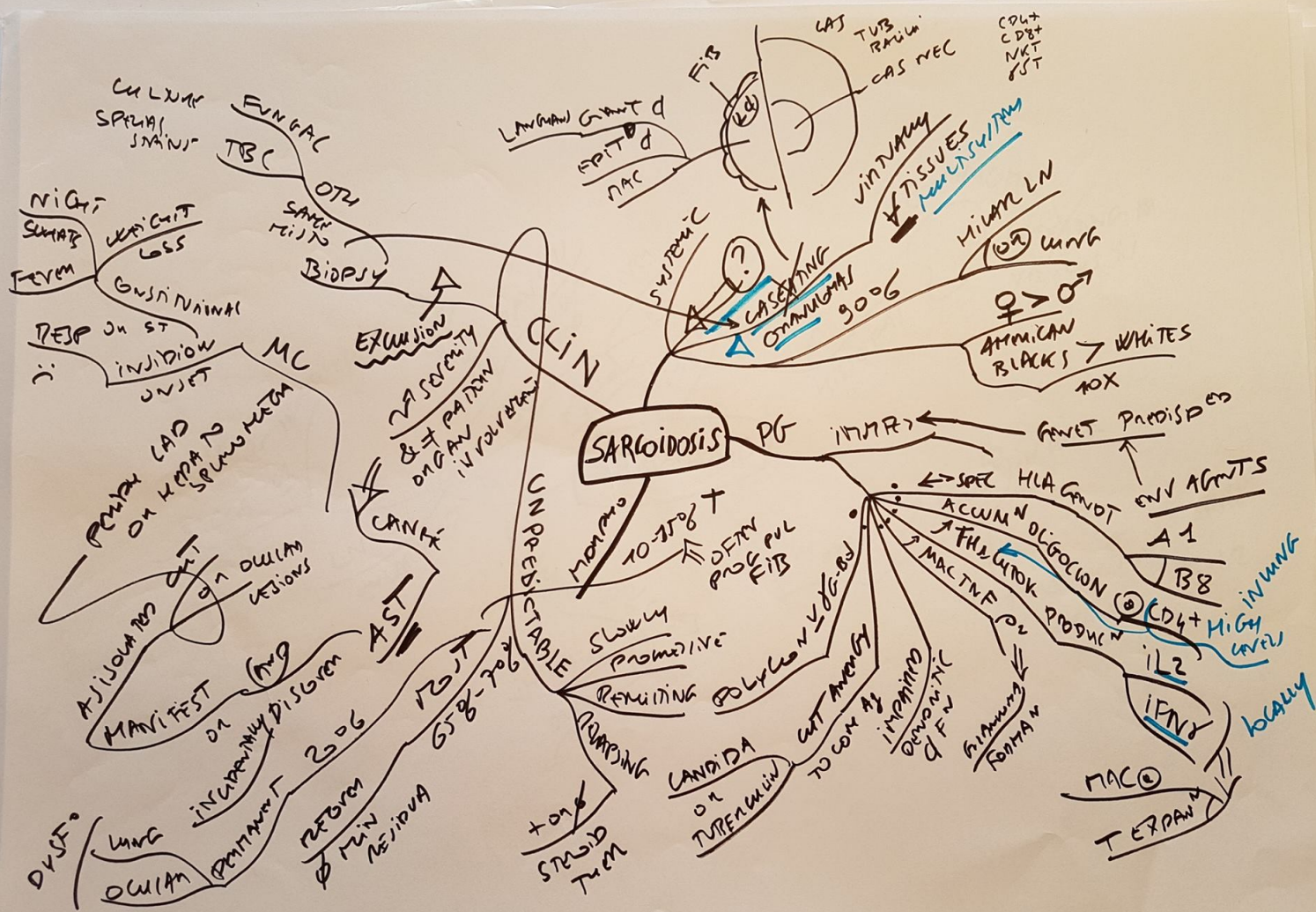
OTH GRANULOMAS

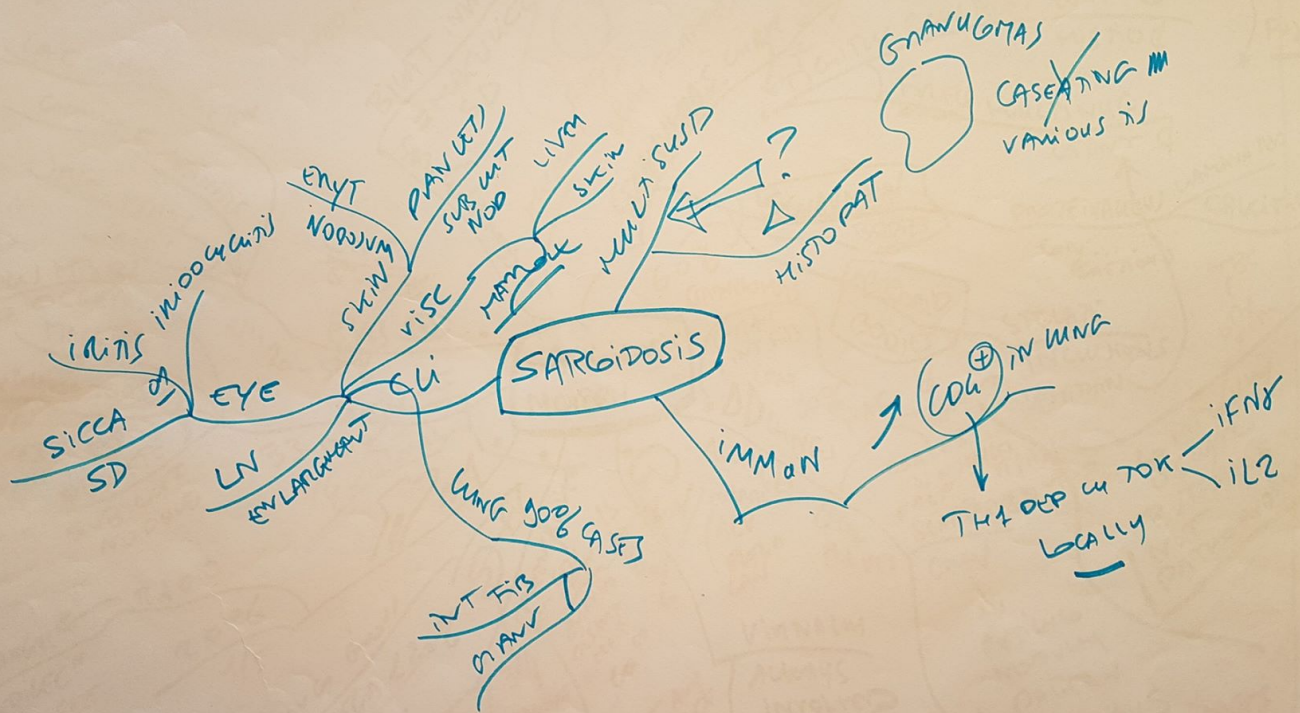
→
"ASTEROID"
BODIES
★ VIRTUALLY Δ
BUT HARD
TO FIND

~~CAS~~ GRAN
RULE

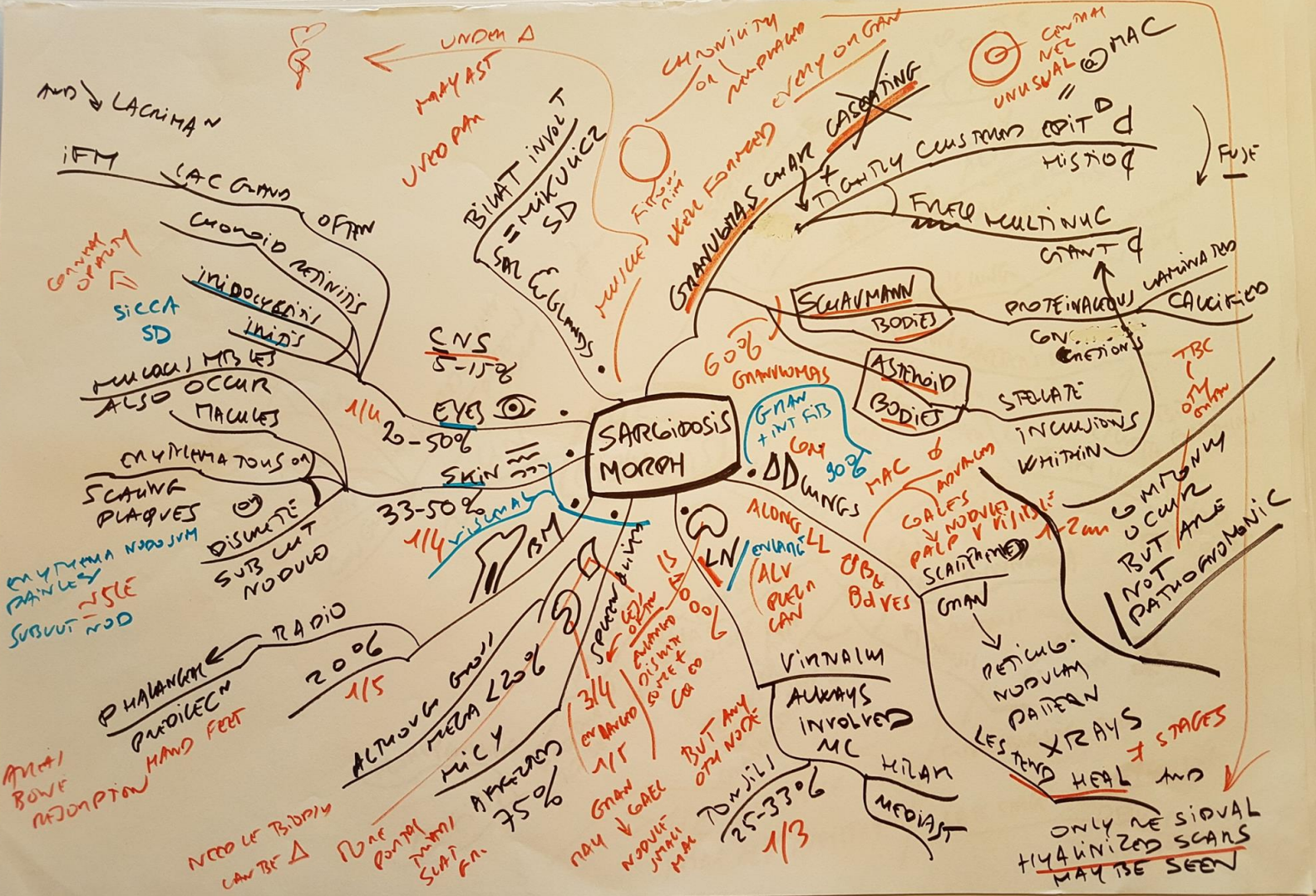
SARCOIDOSIS

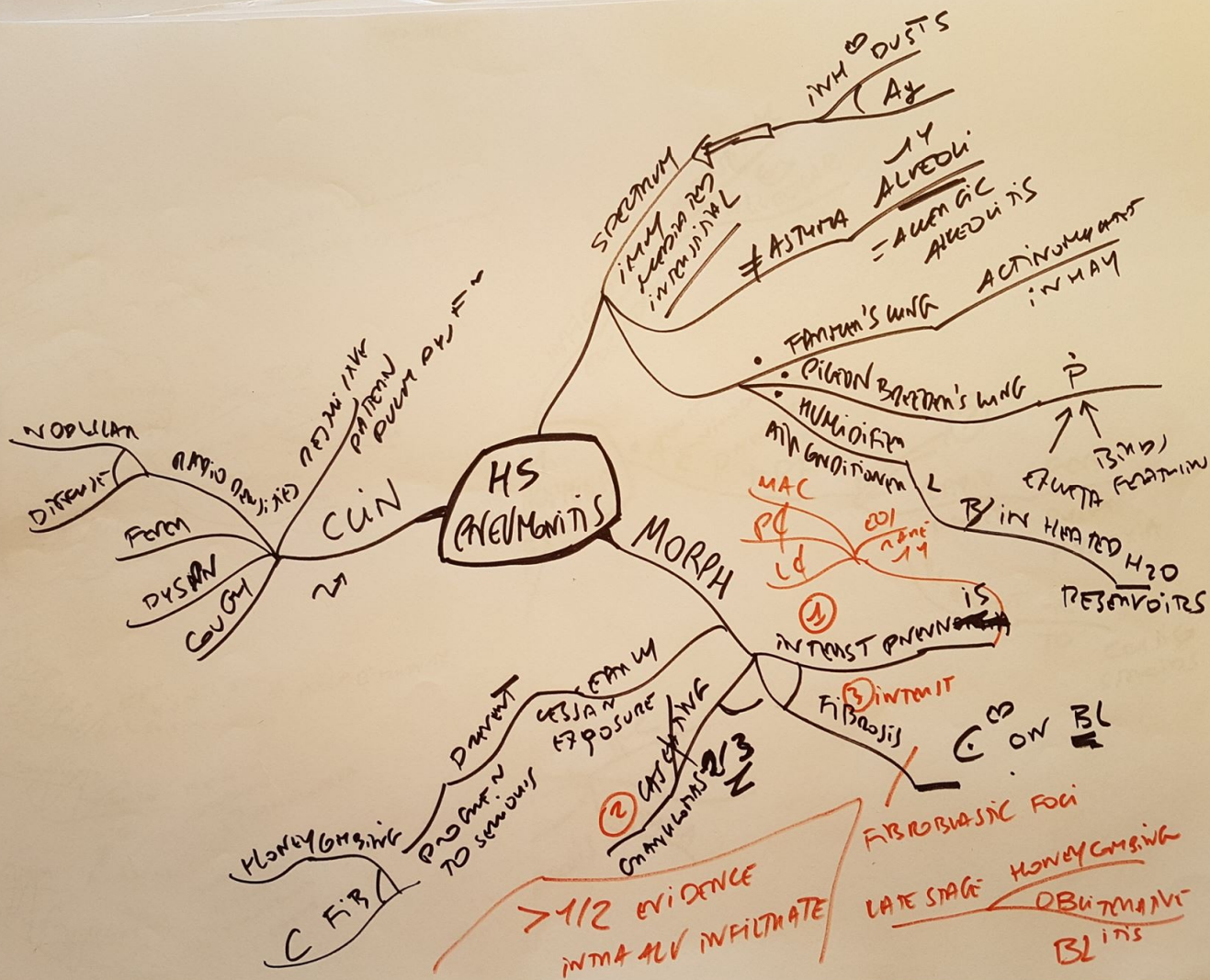
• MAINLY UNIL. BUT EYE (SUN) ANY WHERE
• ? ETIO
• F IMM GRAFT
• ♀ > ♂
• B > W
• YOUNG ADULT BLACK ♀

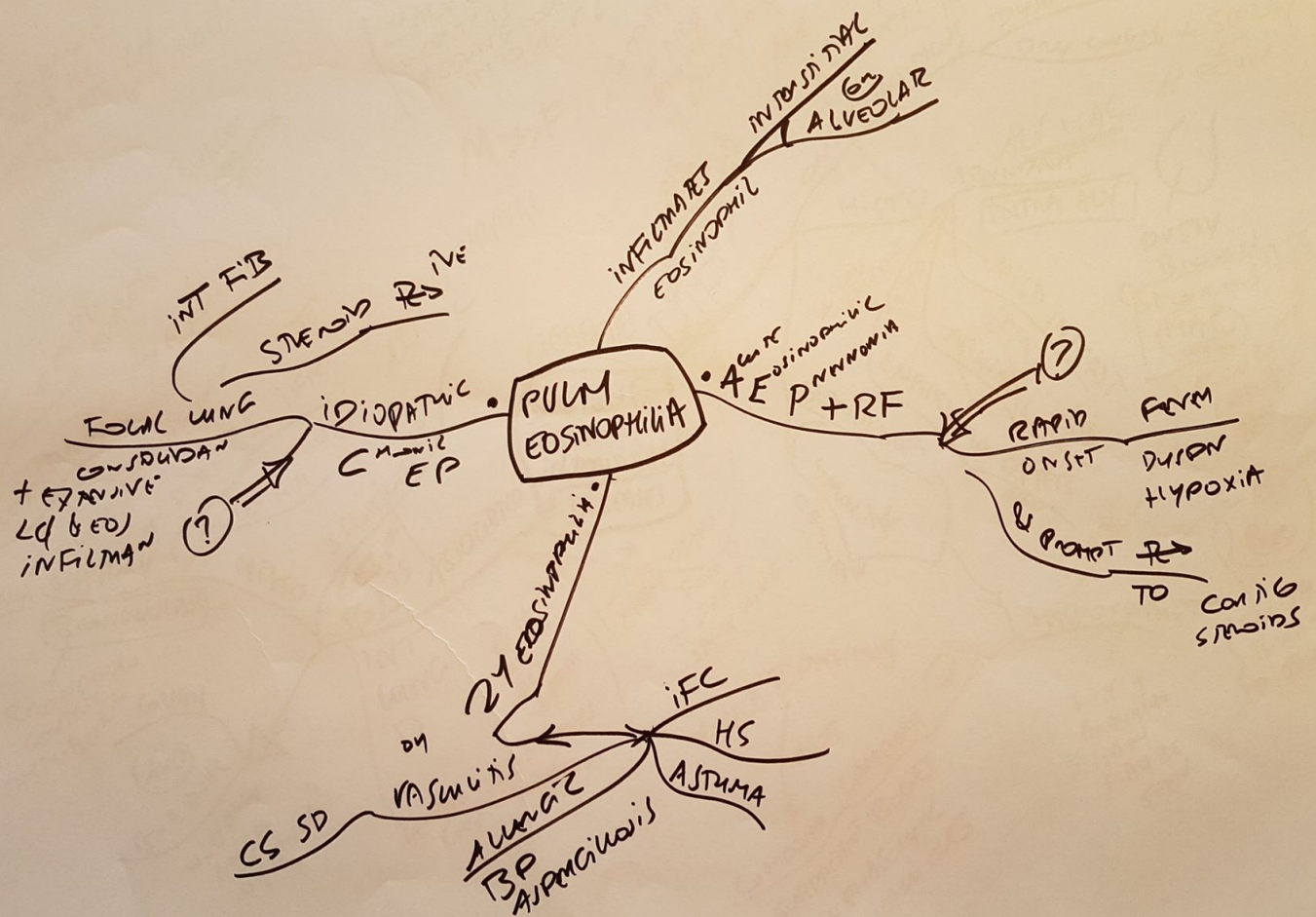


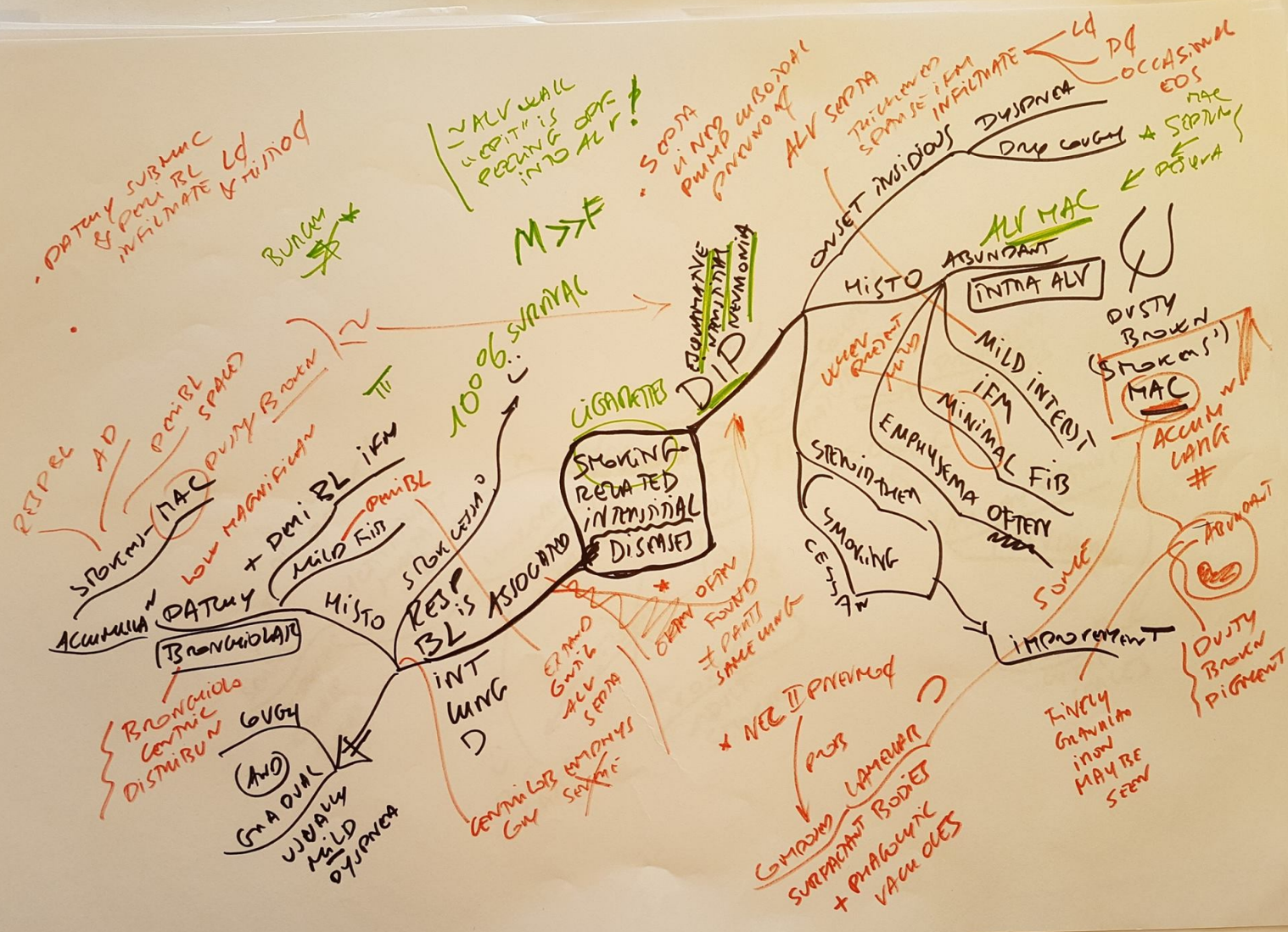


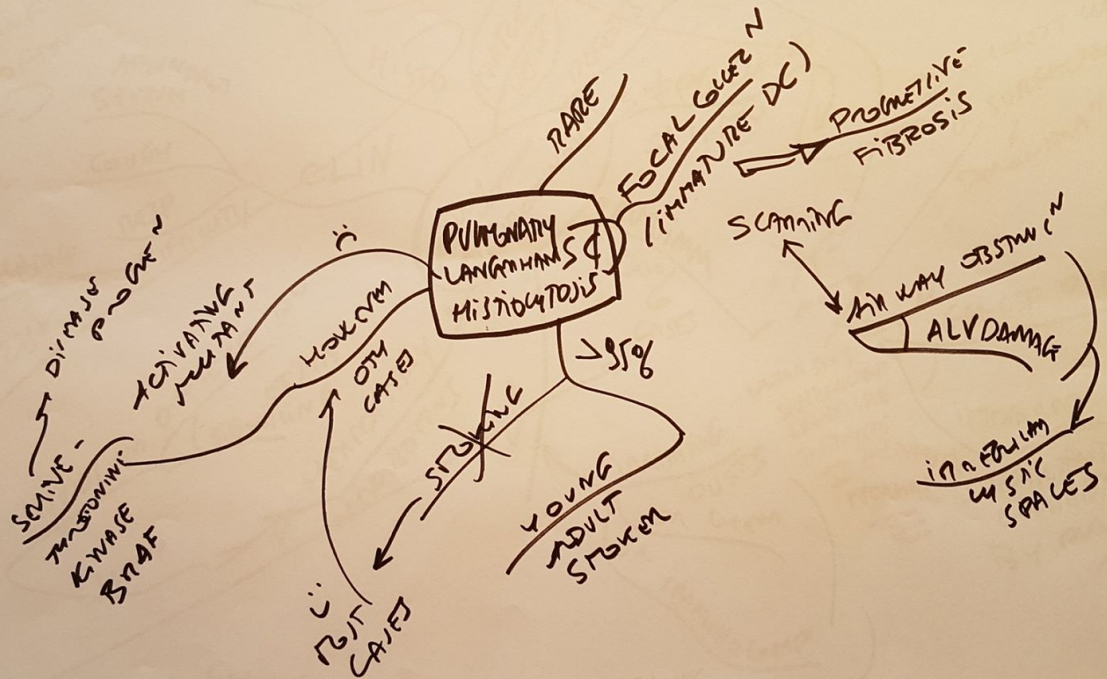
SARCOIDOSIS MORPH

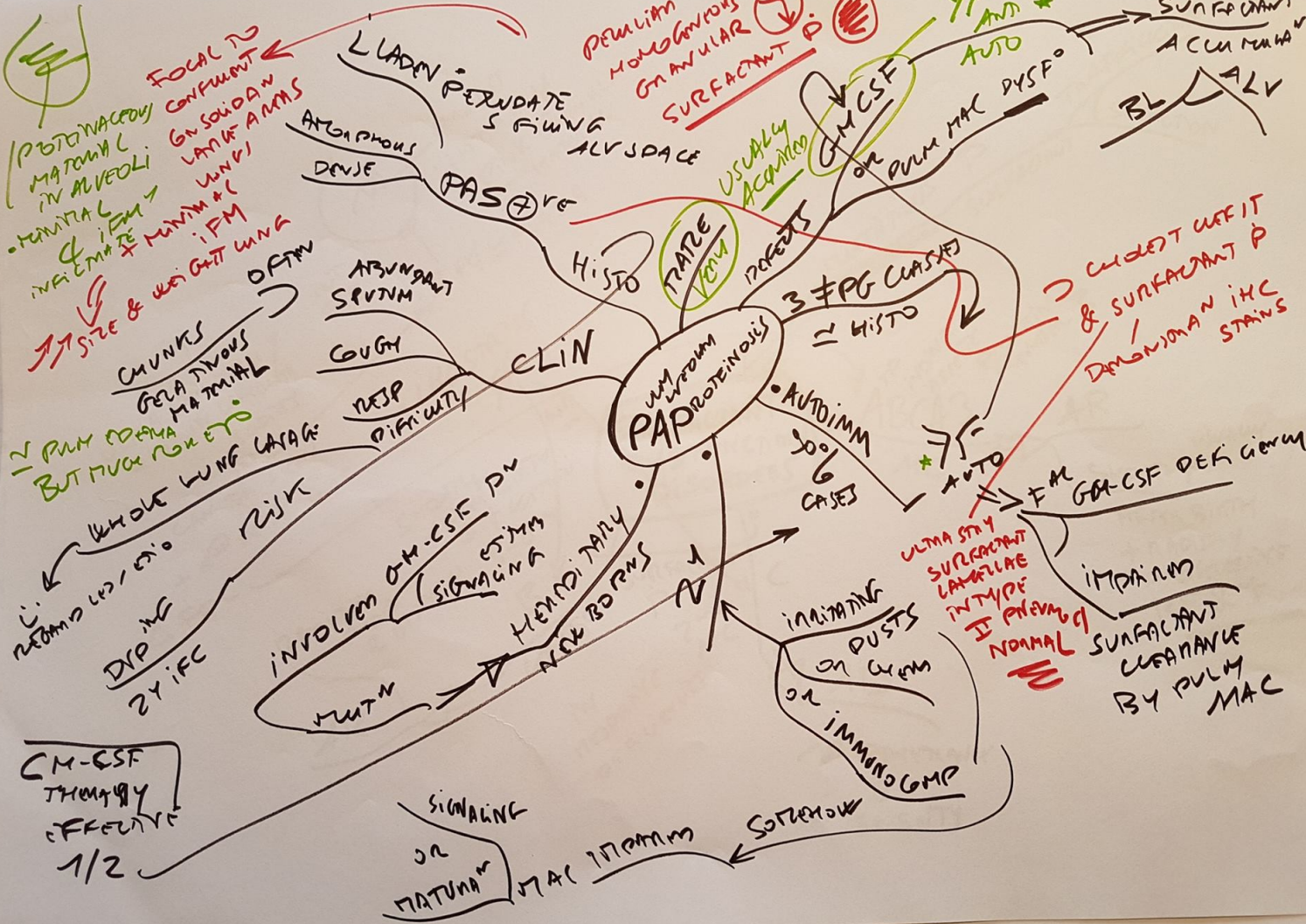


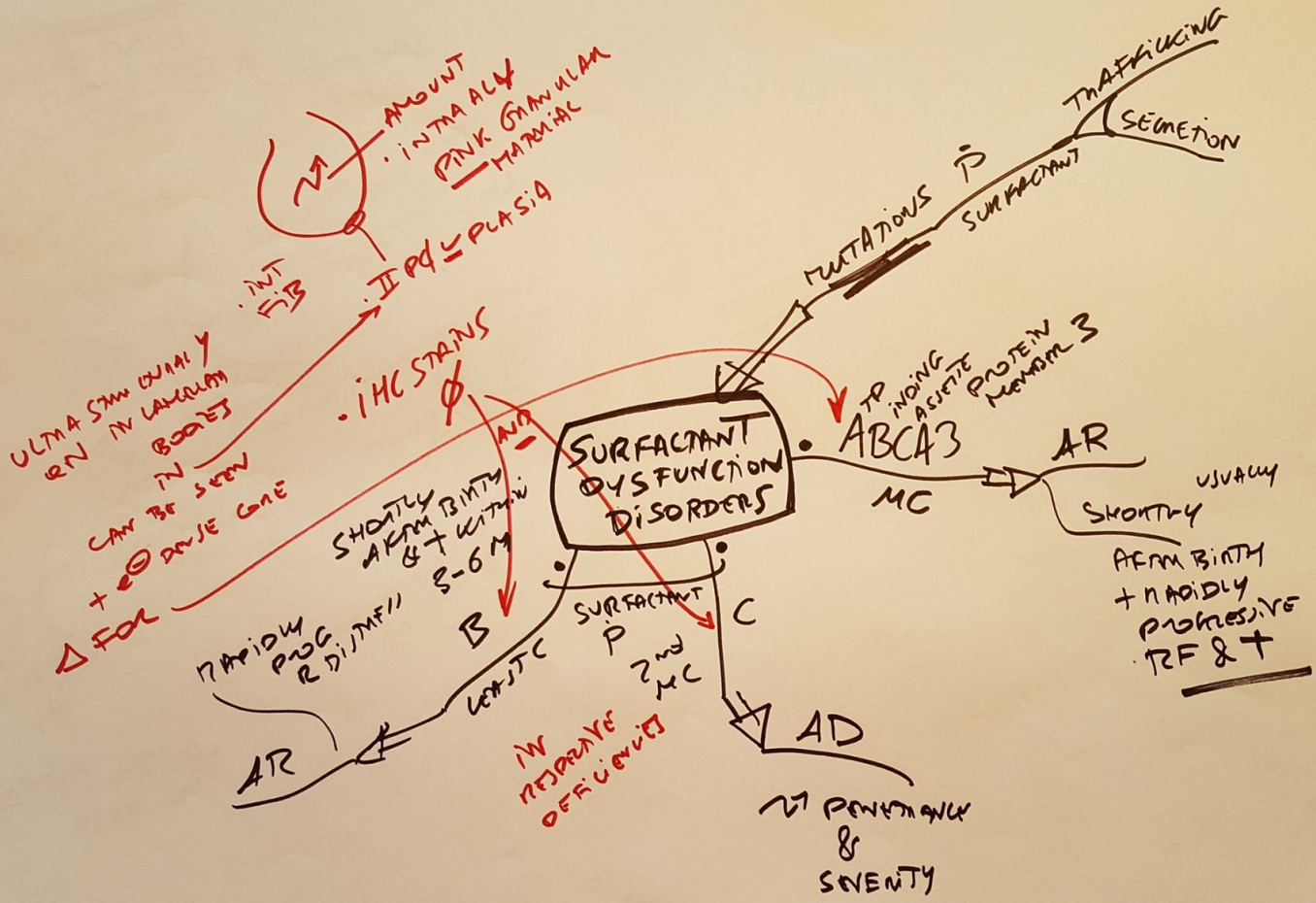


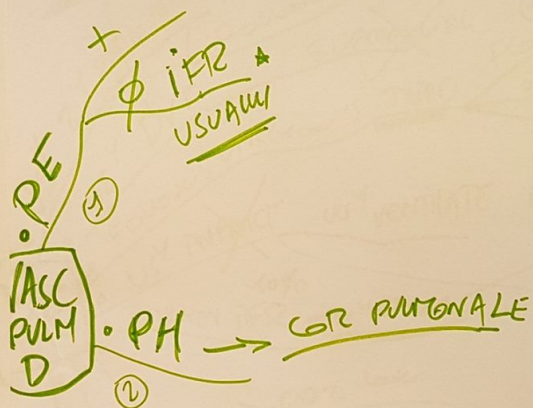
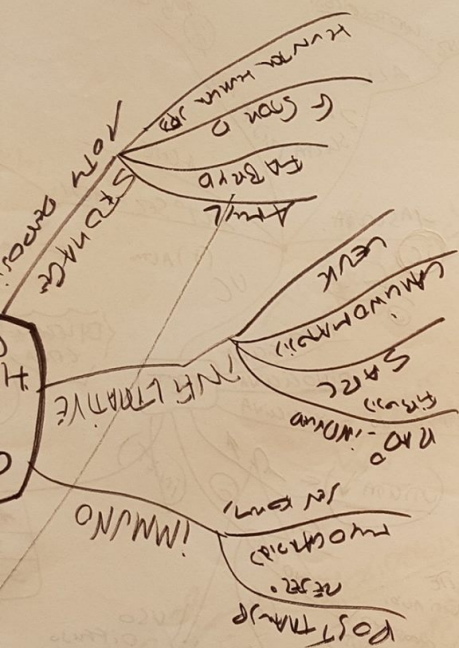








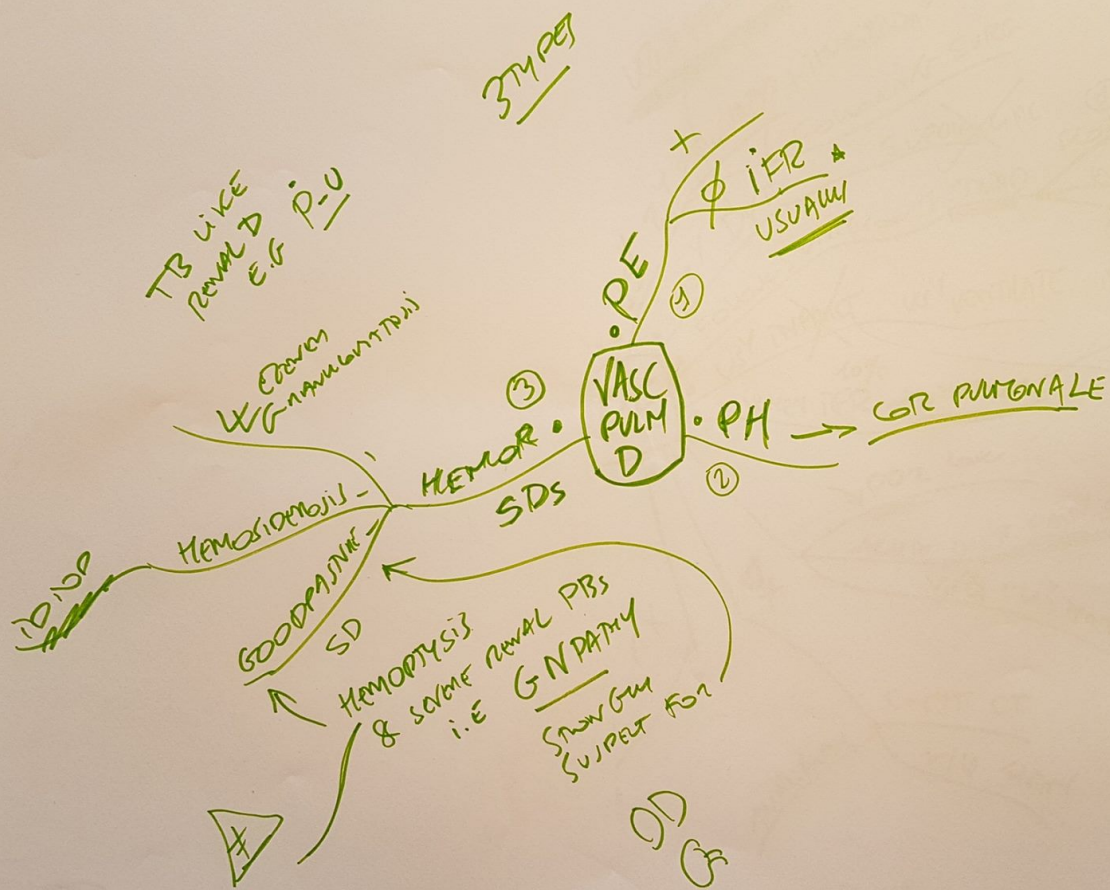




my
sum
RET FOR

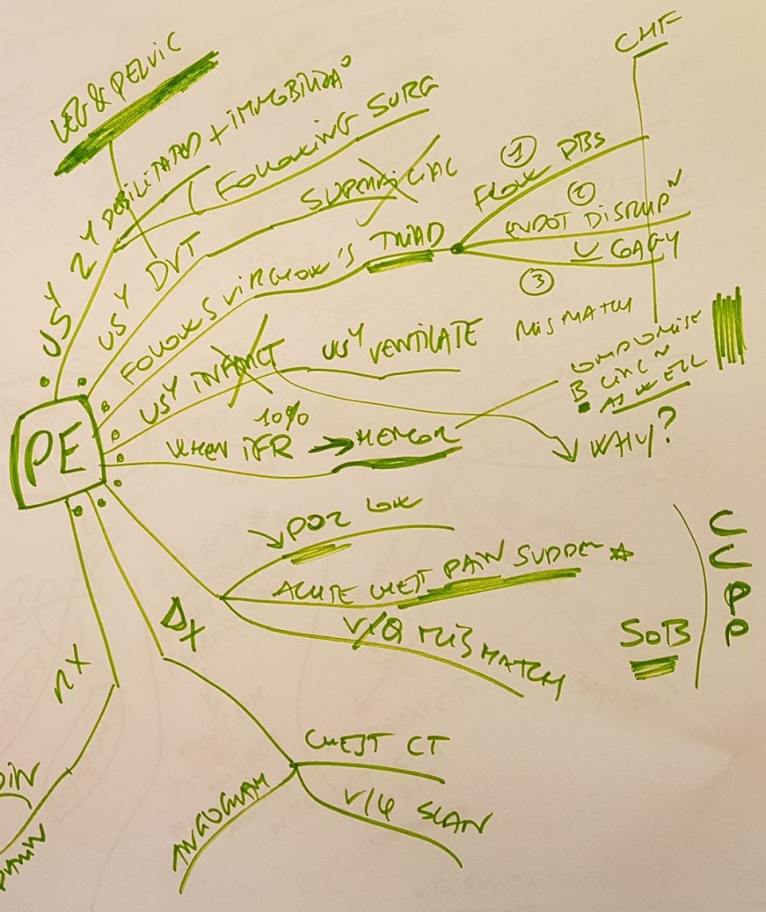
OD
OR

VASCULATURE



PE

- US & PERVIC
- US 2 Y DILATED + IMMERSED
- FOLLOWING SURG
- SUPRAVASCULAR
- (1) PBS FLOW
- (2) ENDO DISSECT
- (3) GADY
- MISMATCH
- SHOULD BE LINE AT CELL
- WHY?
- 10% WHEN IFR → HEMOR
- POZ LOW
- ACUTE UET PAW SUPP*
- V/Q MISMATCH
- SOB
- CHEST CT
- V/Q SCAN
- ANGIOGRAM
- NX
- Dx



REMAINING INFARCTION
③ 50% RISK OF HF

ALTHOUGH MC NOT ONLY TENDS TO MET PAIN AND/OR HEMOPTYSIS
CAN SAME EFFECTS

CORRELATES WITH PULMONARY PE
DEEP LEG VV TISSUE USUALLY
35%

EMBOLOGIC
N ALWAYS ALLOID ALL
RARE
OCCASIONS
IN TISSUES

CD embolus + DISSEMINATED PH
PULM AS HF

② shock
A CORPUS
CAN + SUPPLY

EXERCISE/MECHANICAL DYSOXYGEN
LARGE E
UN GW

CLIN
60-80% STENT MAJORITY
MULITON RE MULTIPLE EXHAUSTION ONLY 10%

PE & INFARCTION
PP RE (AND)
CIN

EXTENT PA OBSTRUCTION
SIZE OCCURRING VESSEL(S)
EMBOLI
OVERALL STATUS CV SYSTEM

PA BIRINGAN SADDLE
ON MOUNTAIN MAJOR PA
MULTIPLE SMALL PE (ORANT ON GRM)
PH VASC SCHEM
GCC ON PULM

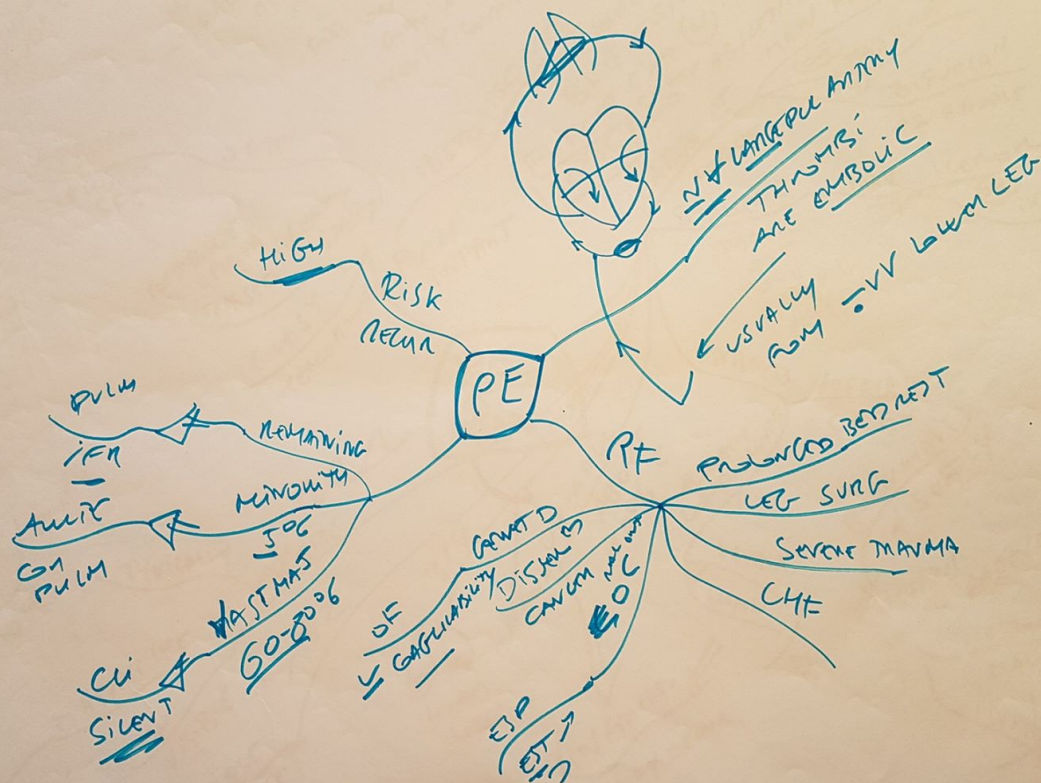
PULM
ARTERIAL RESISTANCE
LACK PERFUSION
VENTILATED UNQ

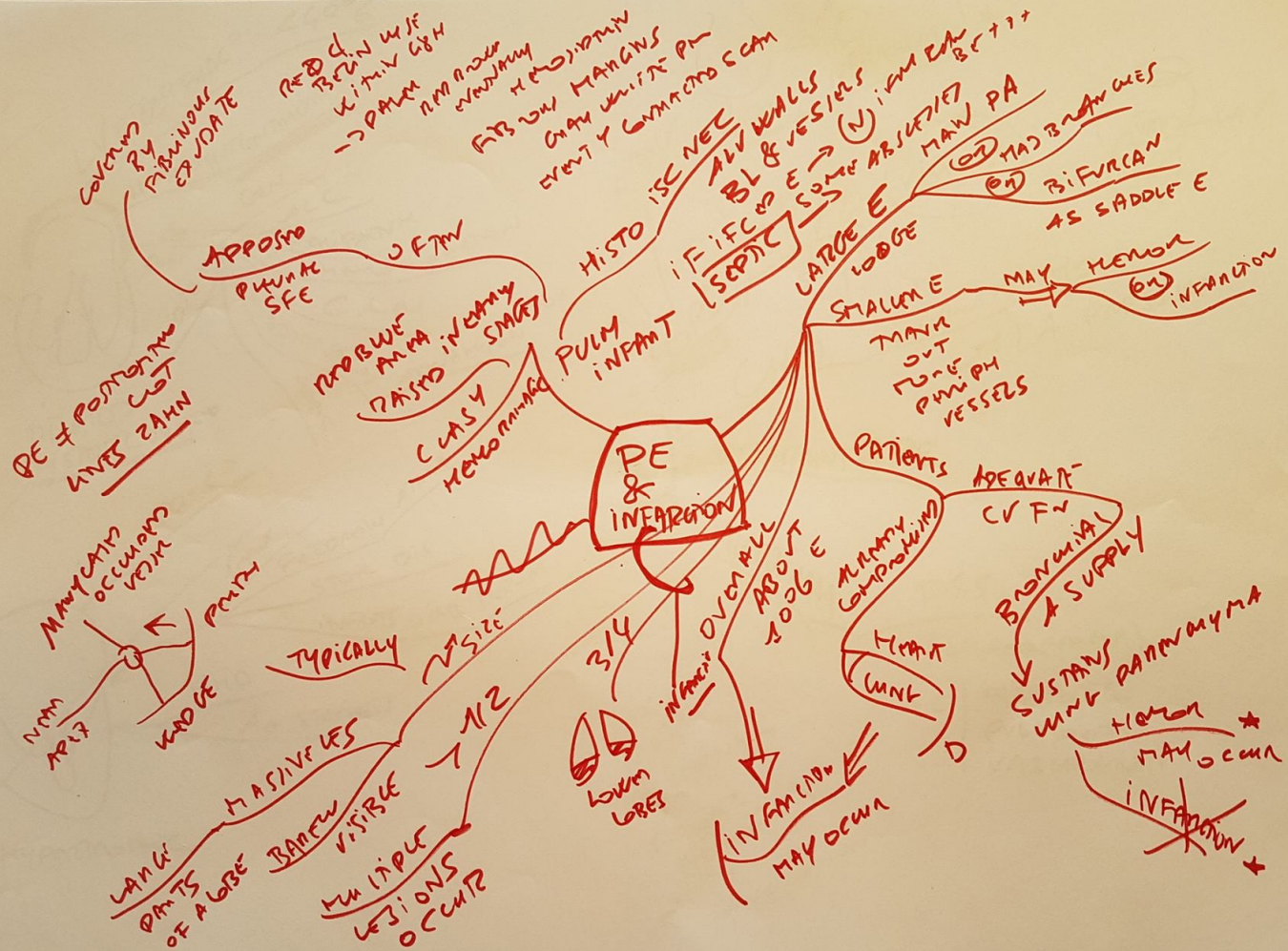
PHENODYNAMIC
RESPIRATORY
COMPLEX

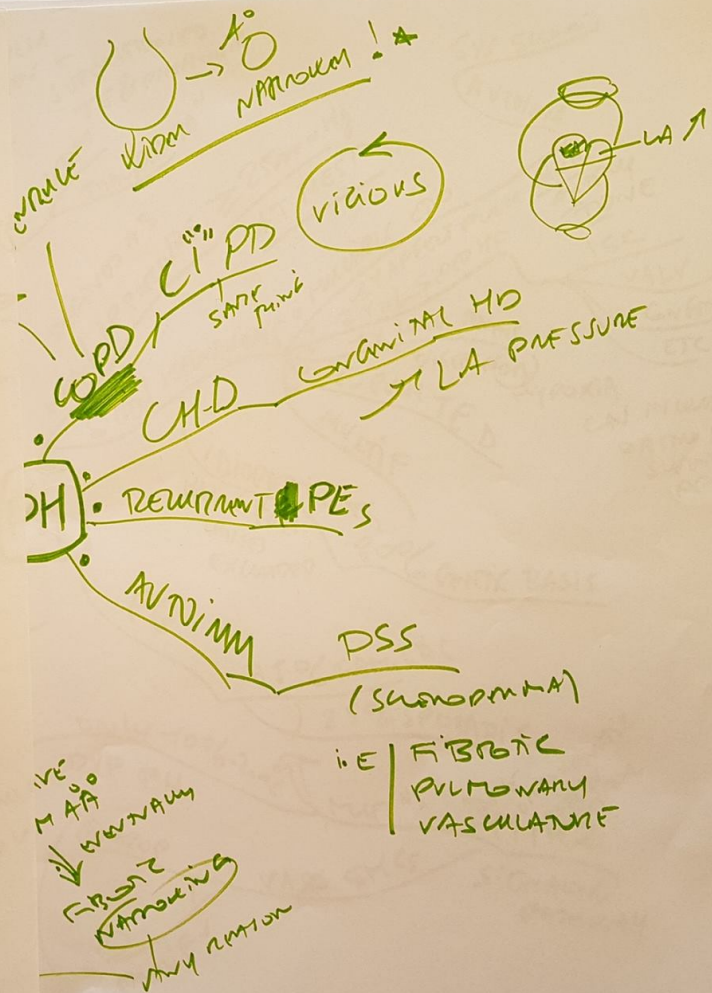
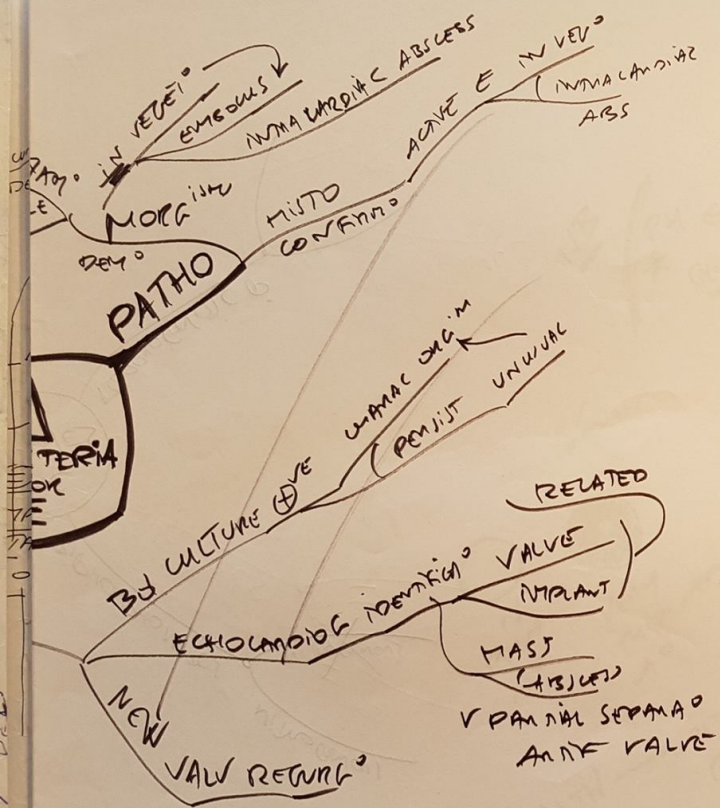
PTS WITH * GROSSLY DISTURBED PULM CIRC (CARDIAC FAILURE)
PDM PH
HAPPE SHAPED
MEMS
ANAL NEC
VASCULATURE AT SITE TISS

REACTIVE (PAT)
VASCULATURE AT SITE TISS

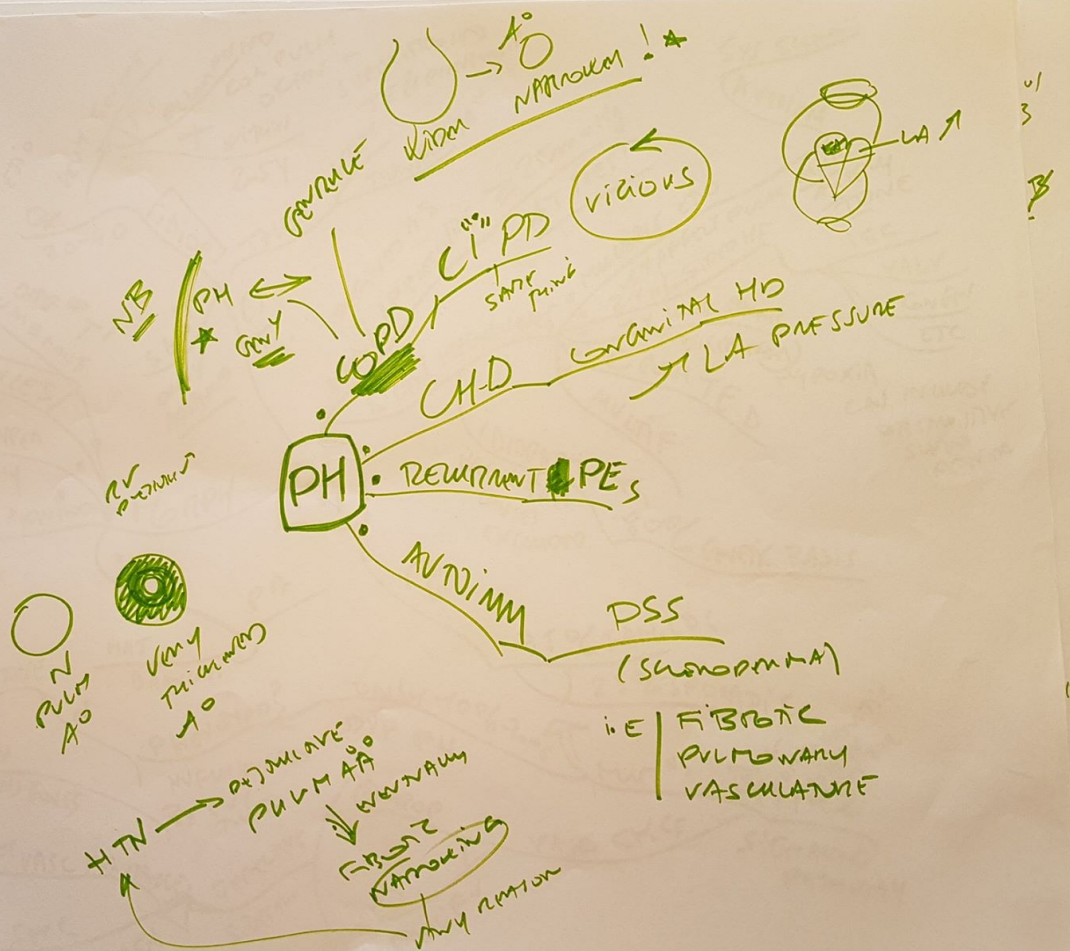
• RISK RECURRENT HIGH

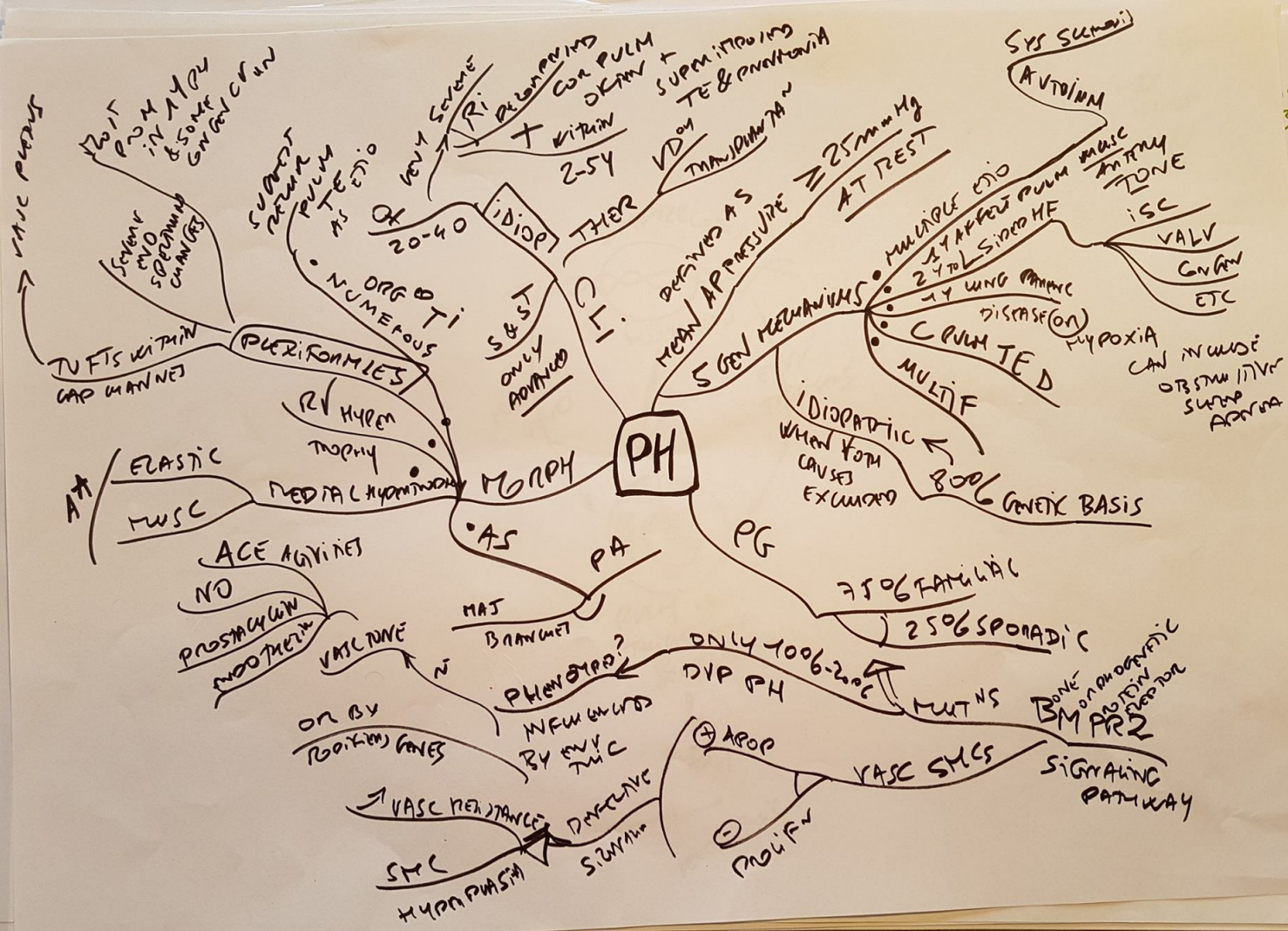




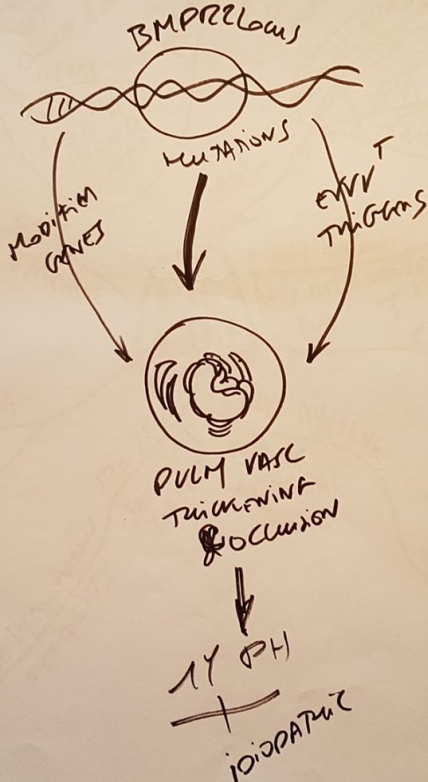


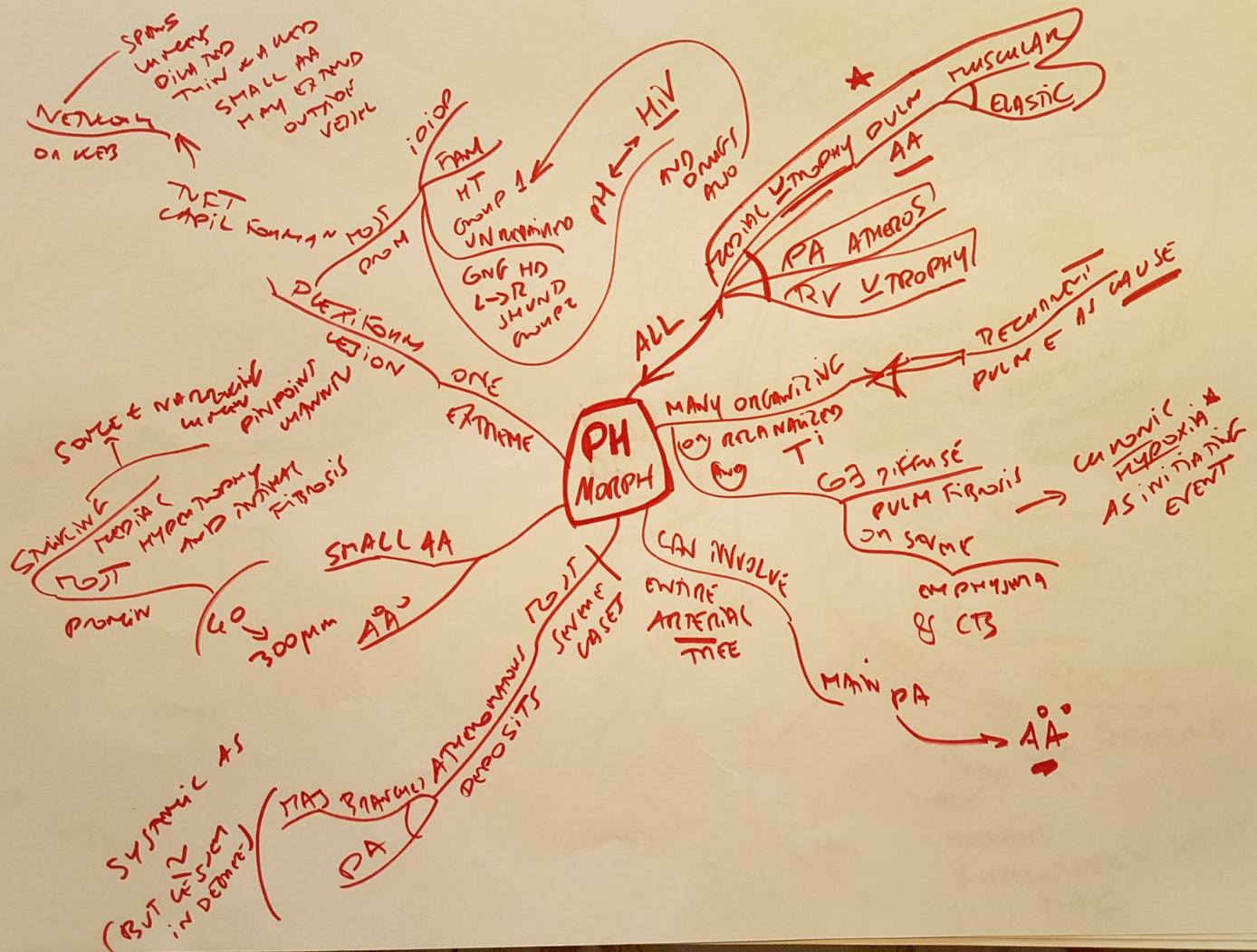
PH

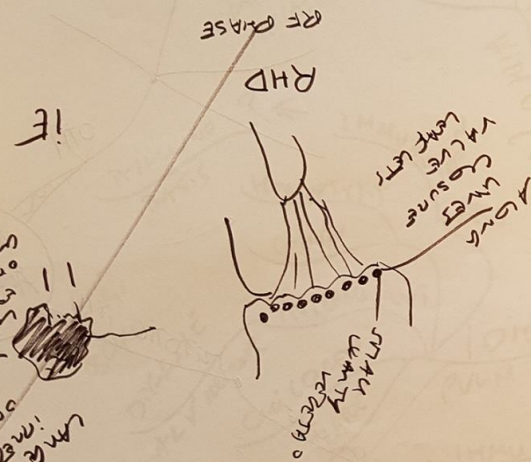




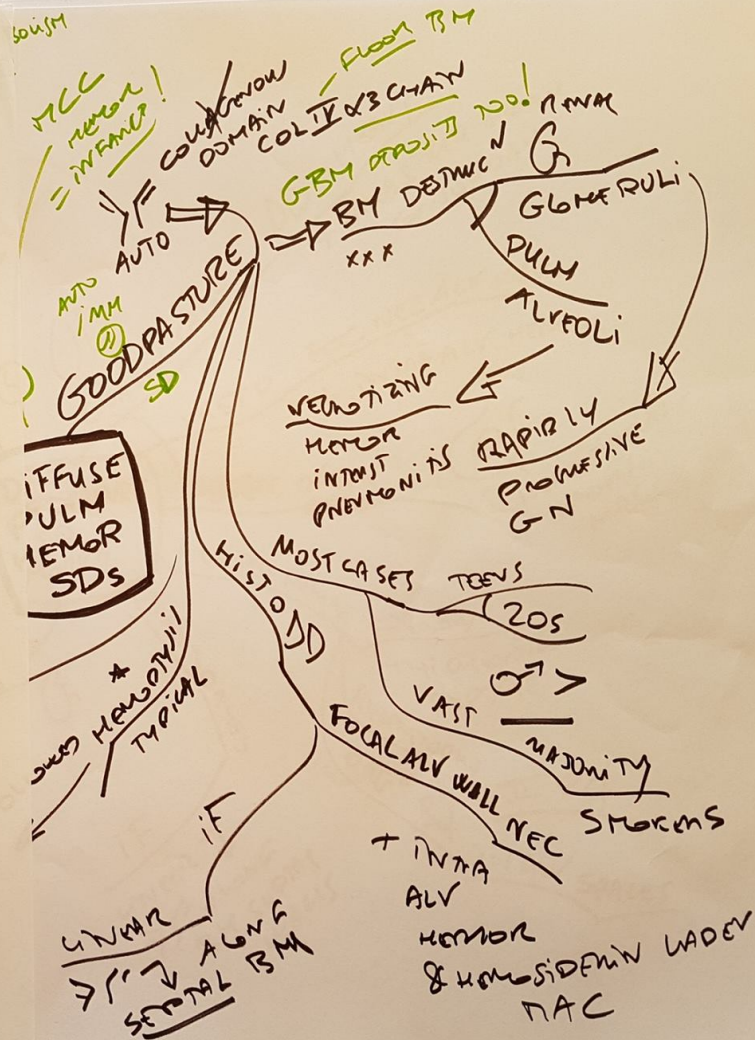
PG-
1Y
idiOP
PH

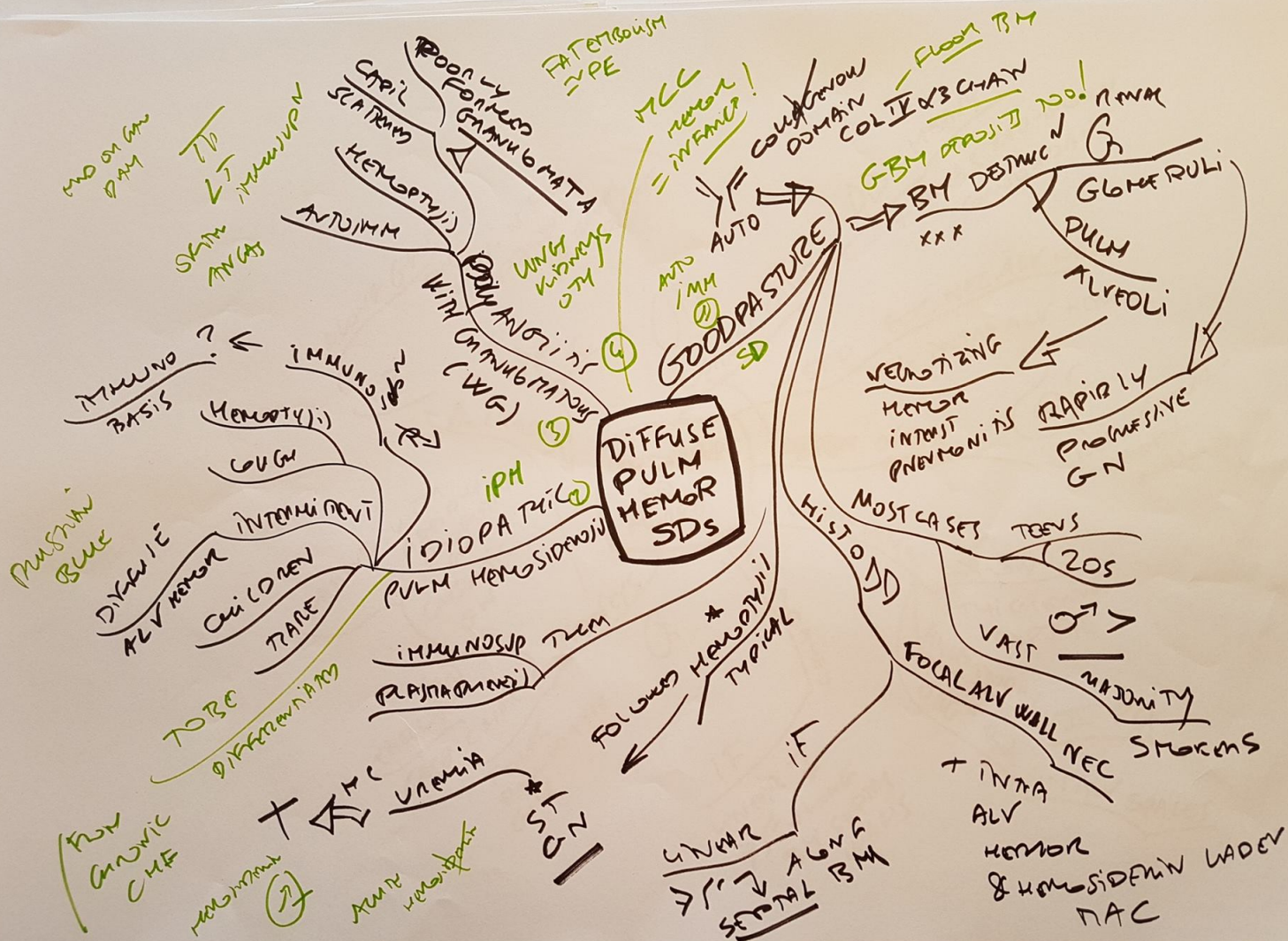


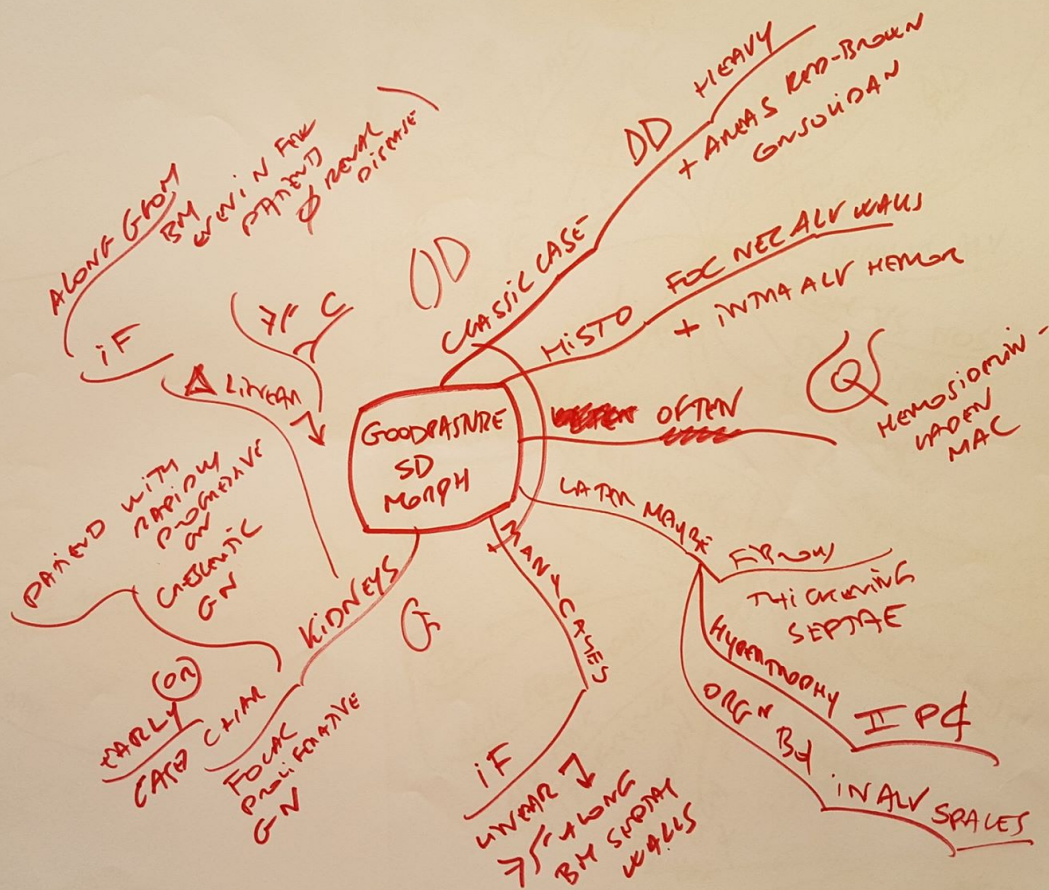




DIFFUSE PULMONARY HEMORRHOIDS

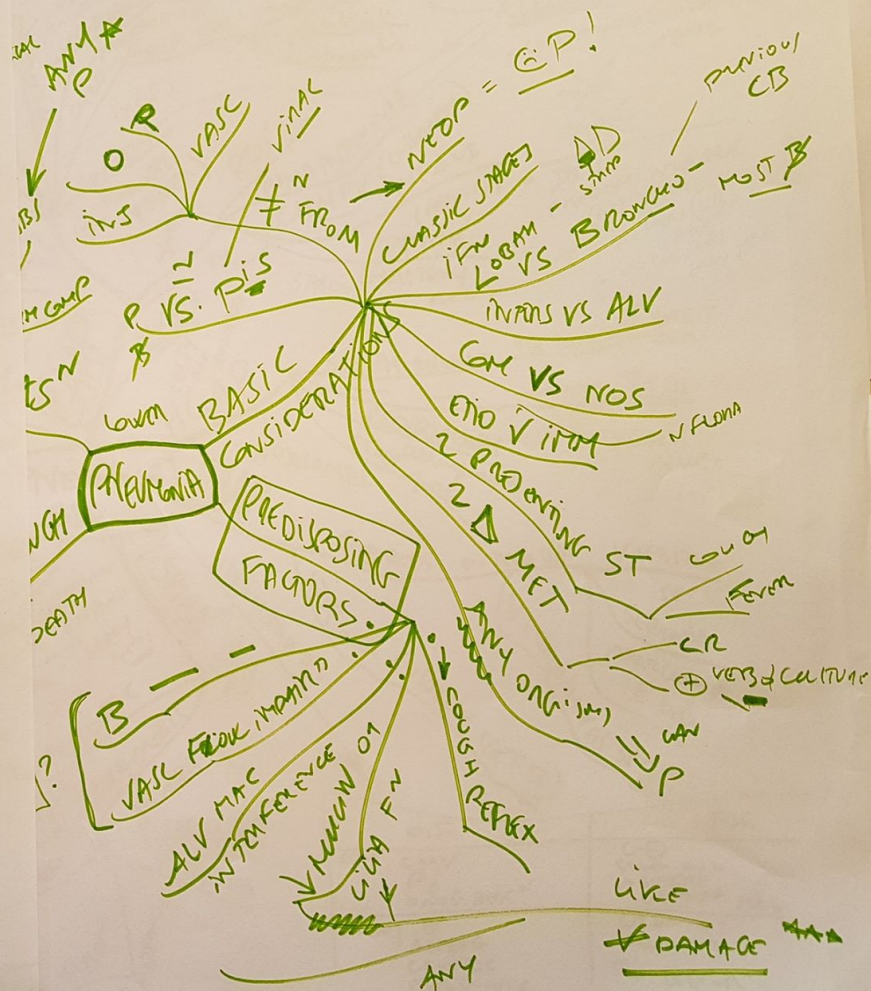


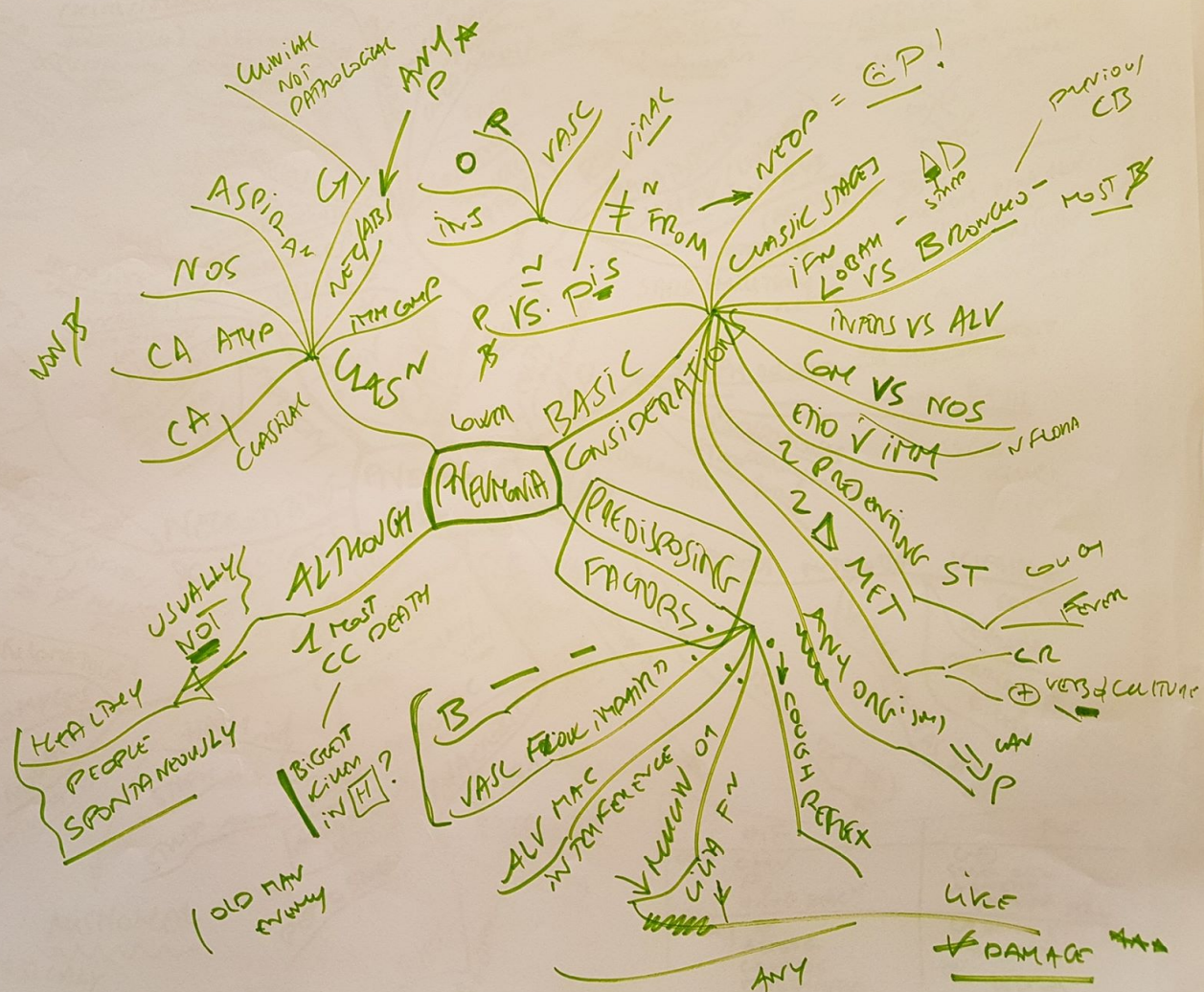




Результат

ifc

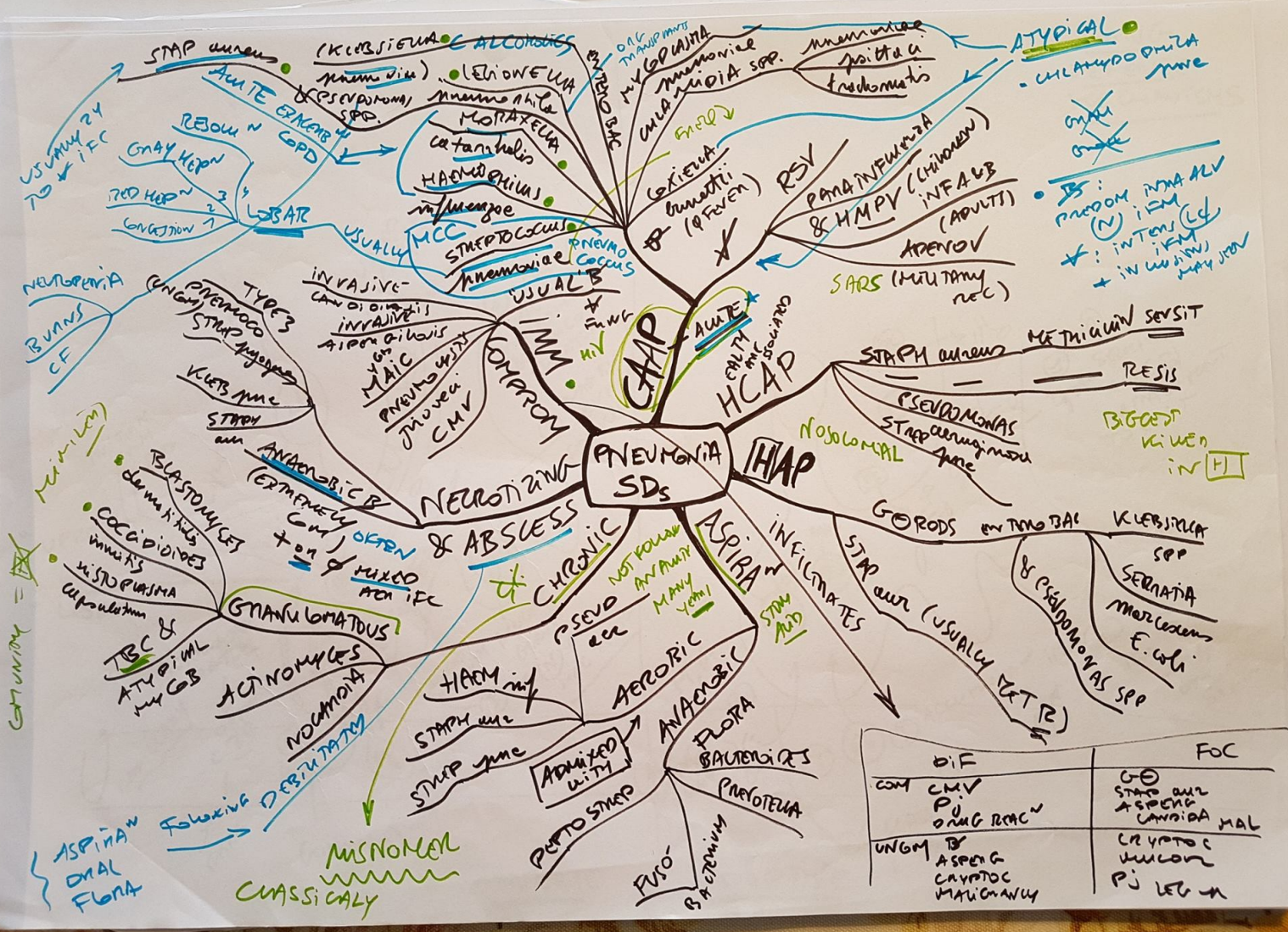




10/10

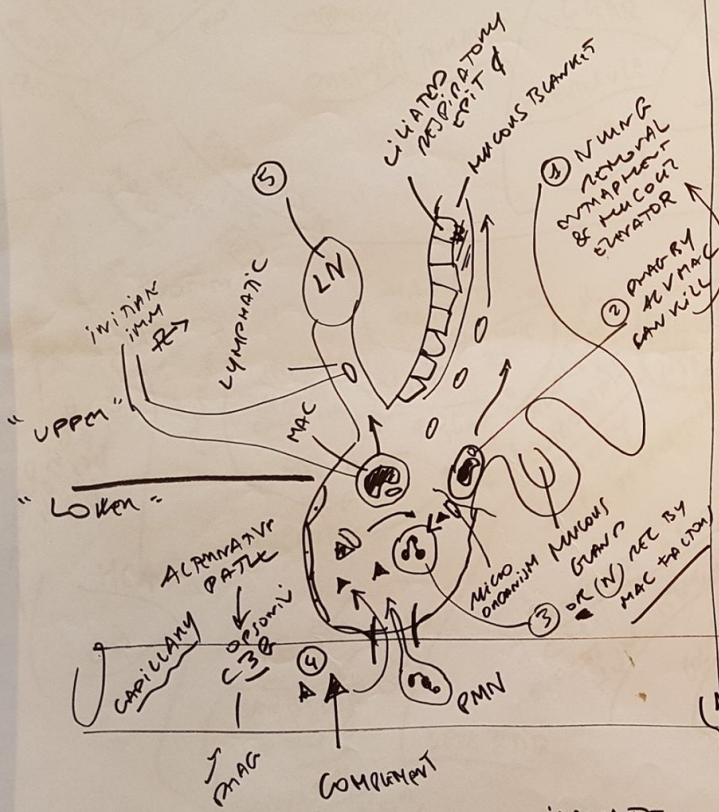
COMMUNITY =

10/10

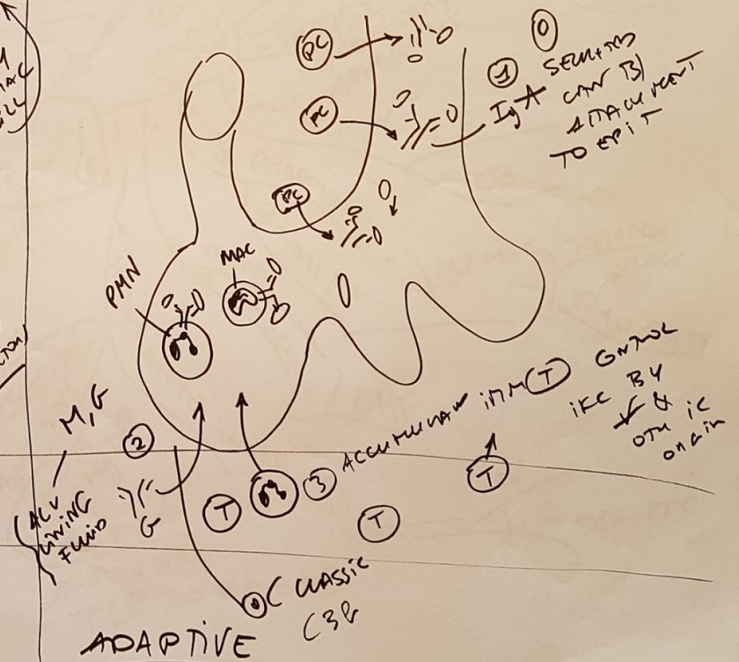


DIF	FOC
COM CMV PU ORG BAC UNGM ASPERG CRYPTOC HISTOPLASMA	GO STAPH AUR ASPERG CANDIDA MAL CRYPTOC HISTOPLASMA PU LEB

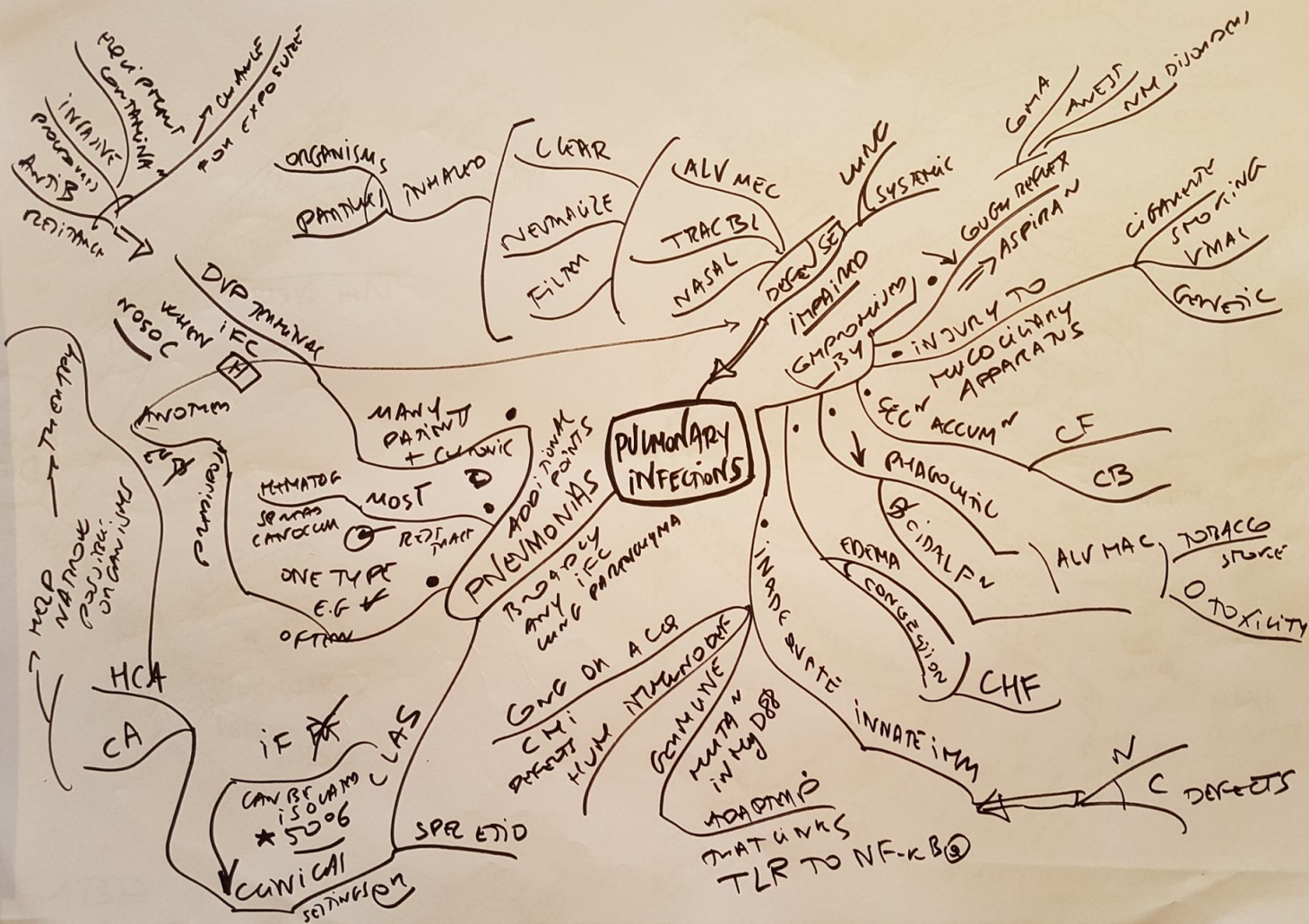
UNG DEFENSE MECHANISMS



INNATE



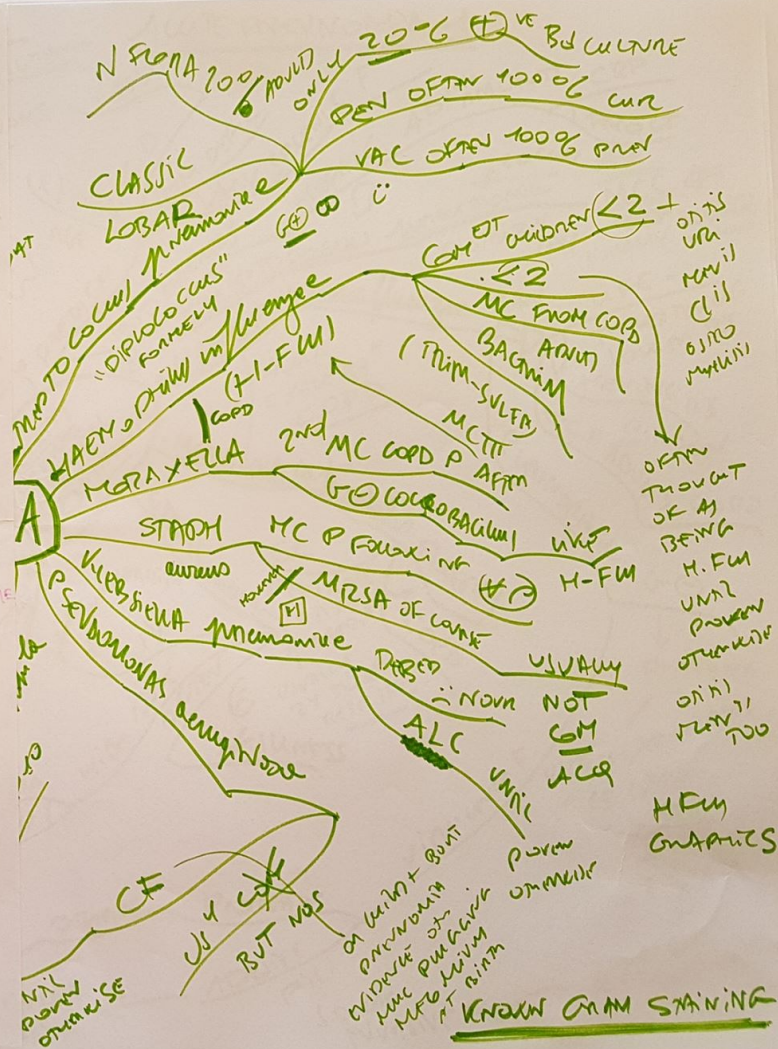
ADAPTIVE

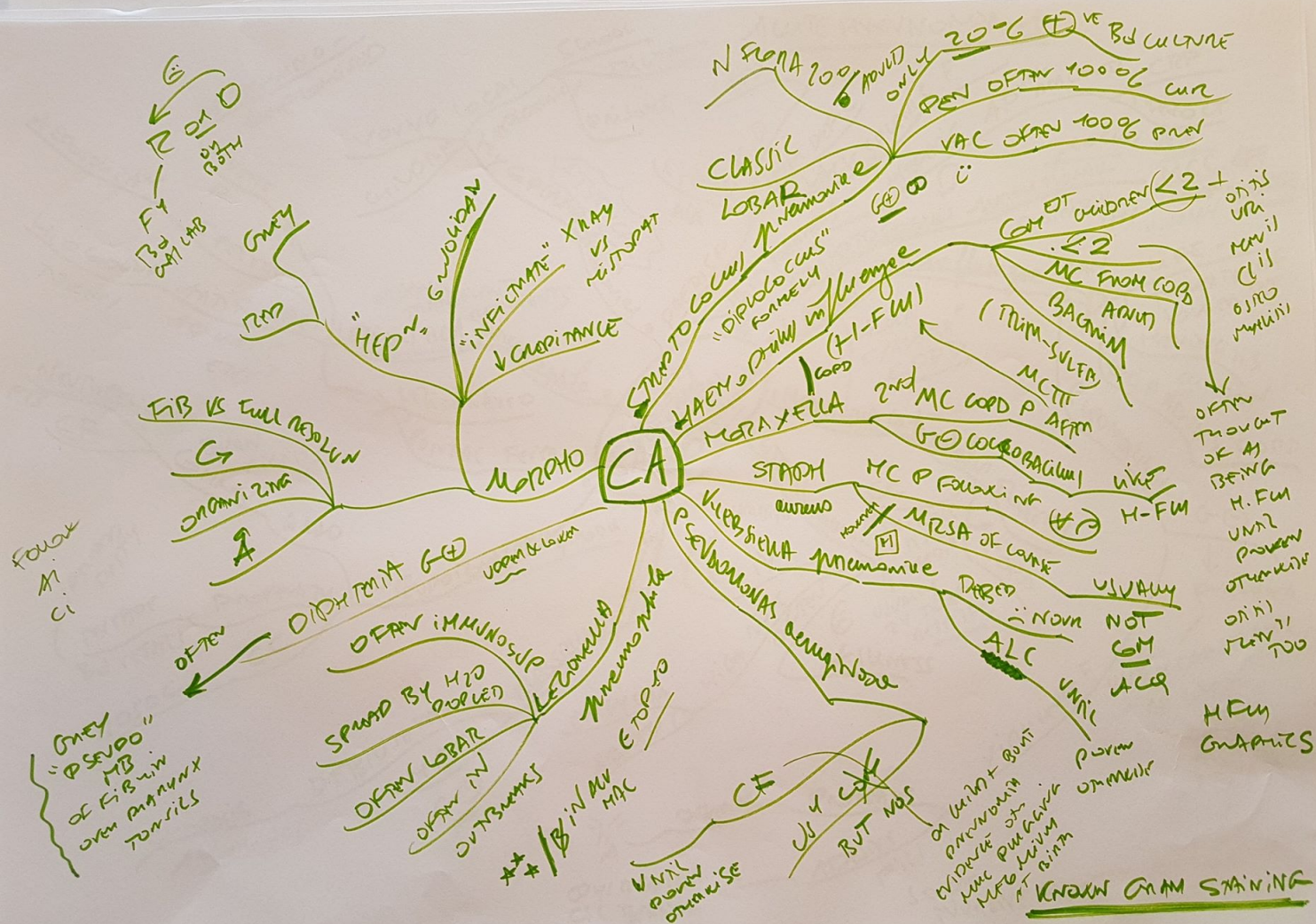


A handwritten mind map on lined paper with the central node 'Disorder' in a box. Two main branches extend from it: 'Genetic' and 'Environmental'. The 'Genetic' branch further divides into 'Inborn error of metabolism', 'Chromosomal abnormalities', 'Single gene disorders', 'Polygenic disorders', and 'Complex disorders'. The 'Environmental' branch divides into 'Infectious', 'Trauma', 'Toxic', 'Nutritional', and 'Lifestyle'.

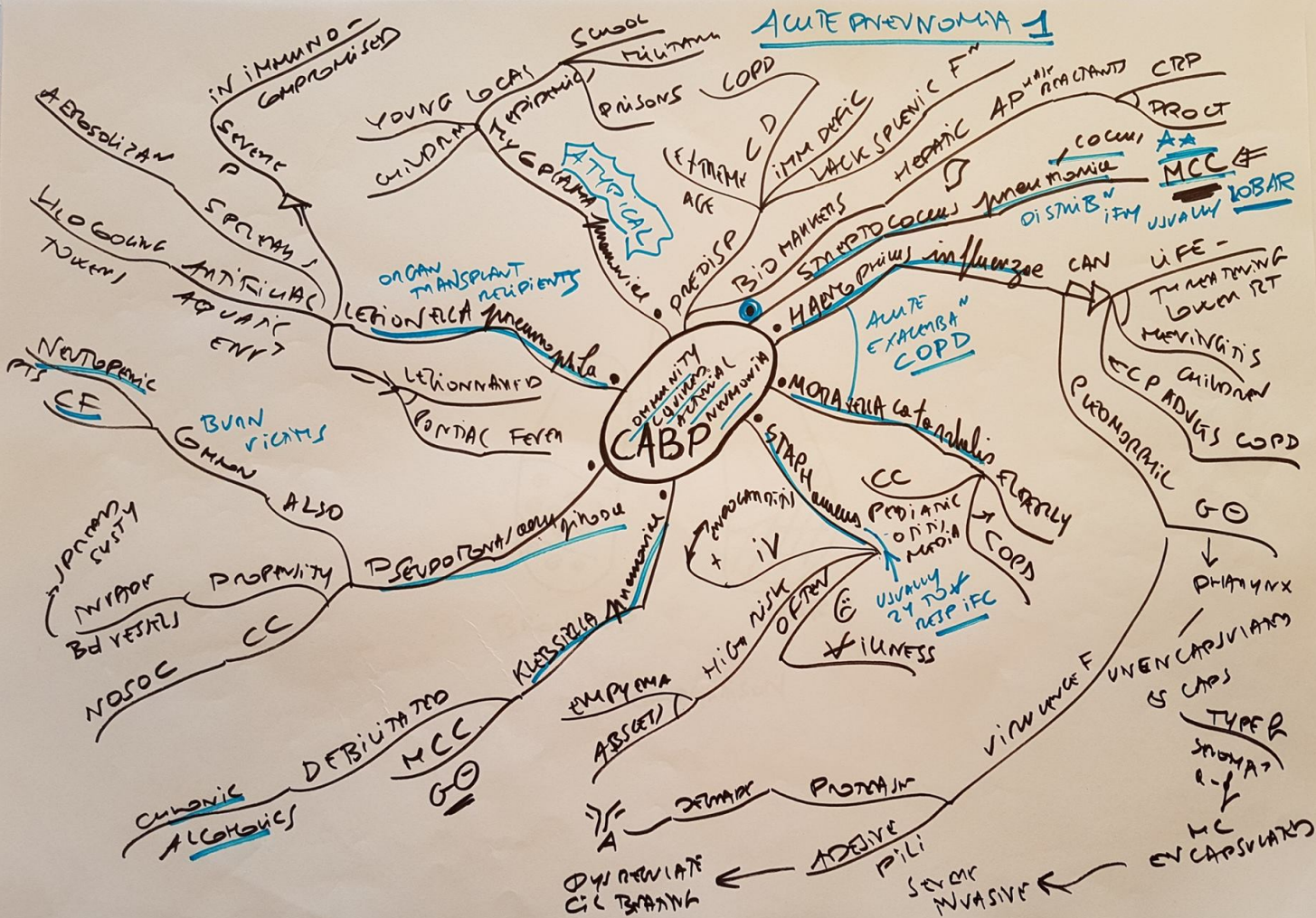
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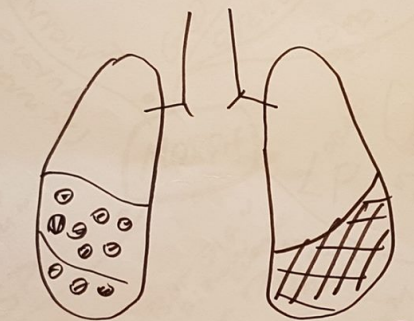
graph LR
    Disorder[Disorder] --- Genetic[Genetic]
    Disorder --- Environmental[Environmental]
    Genetic --- Inborn[Inborn error of metabolism]
    Genetic --- Chromosomal[Chromosomal abnormalities]
    Genetic --- Single[Single gene disorders]
    Genetic --- Polygenic[Polygenic disorders]
    Genetic --- Complex[Complex disorders]
    Environmental --- Infectious[Infectious]
    Environmental --- Trauma[Trauma]
    Environmental --- Toxic[Toxic]
    Environmental --- Nutritional[Nutritional]
    Environmental --- Lifestyle[Lifestyle]
  
```





ACUTE PNEUMONIA 1



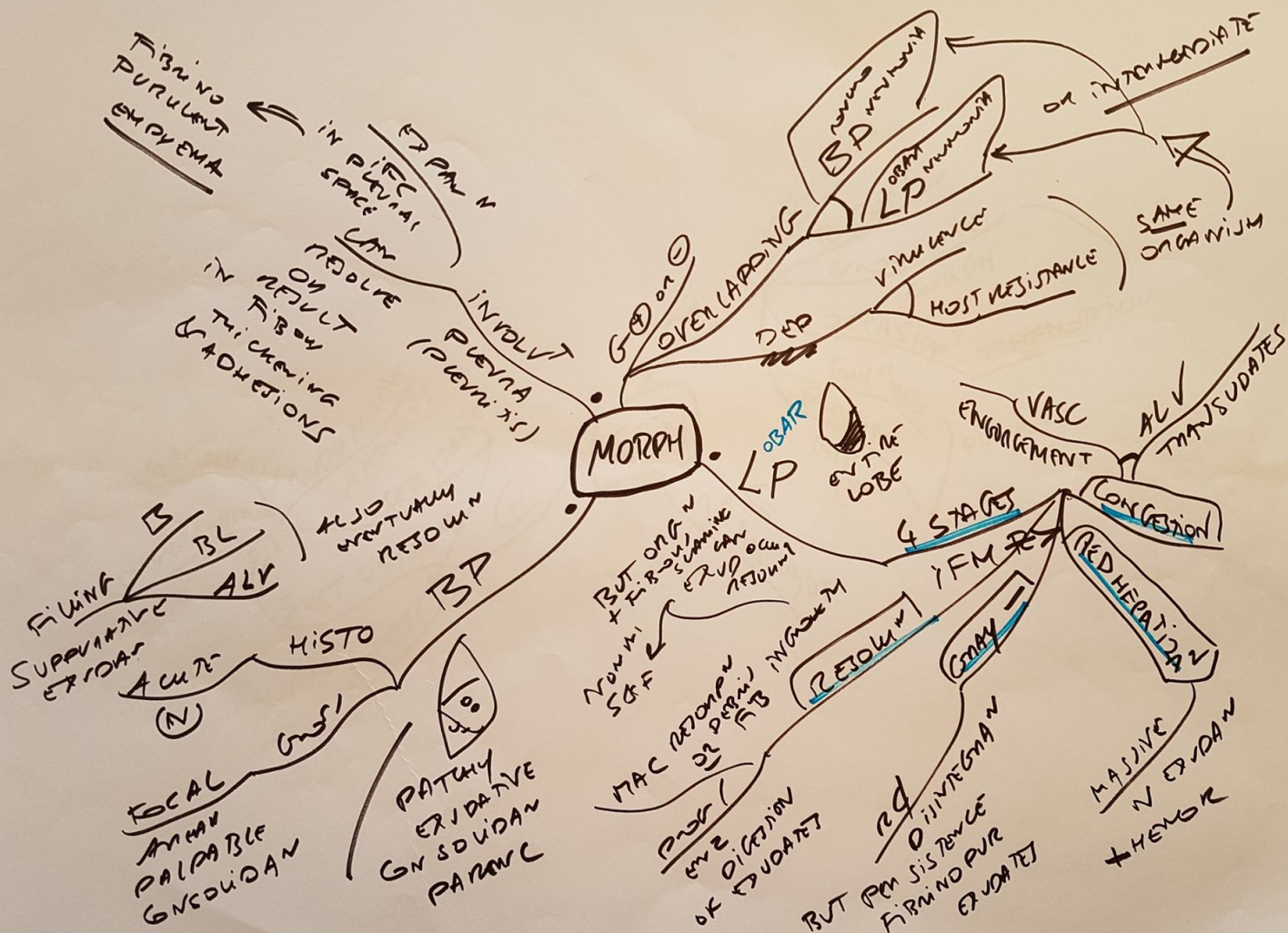


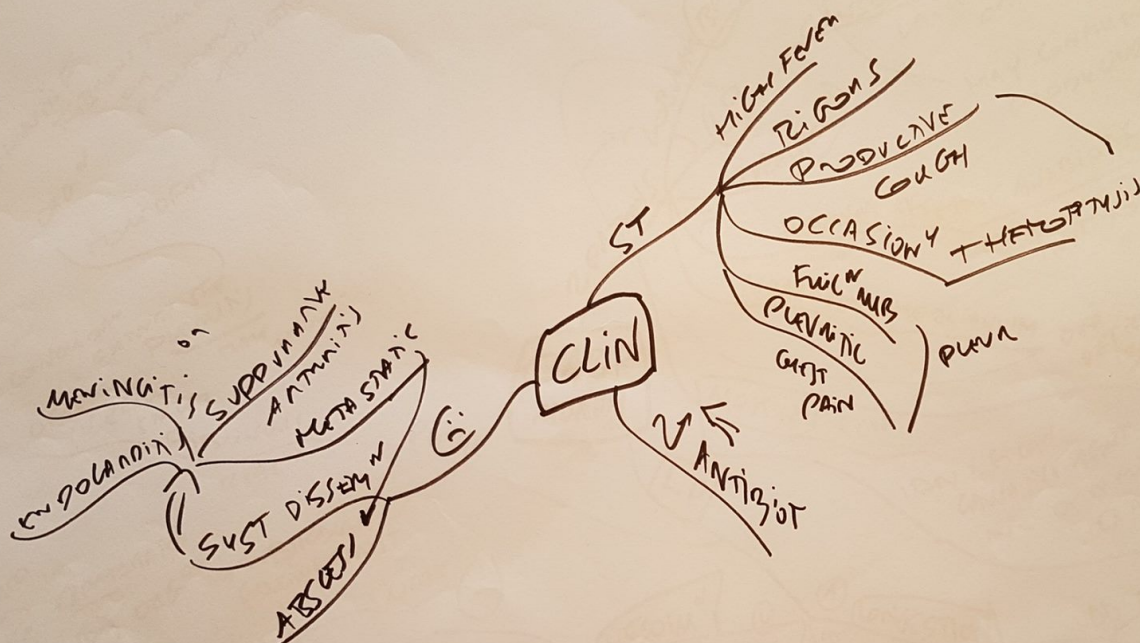
BRONCHOP

LOBAR P

COMPARISON

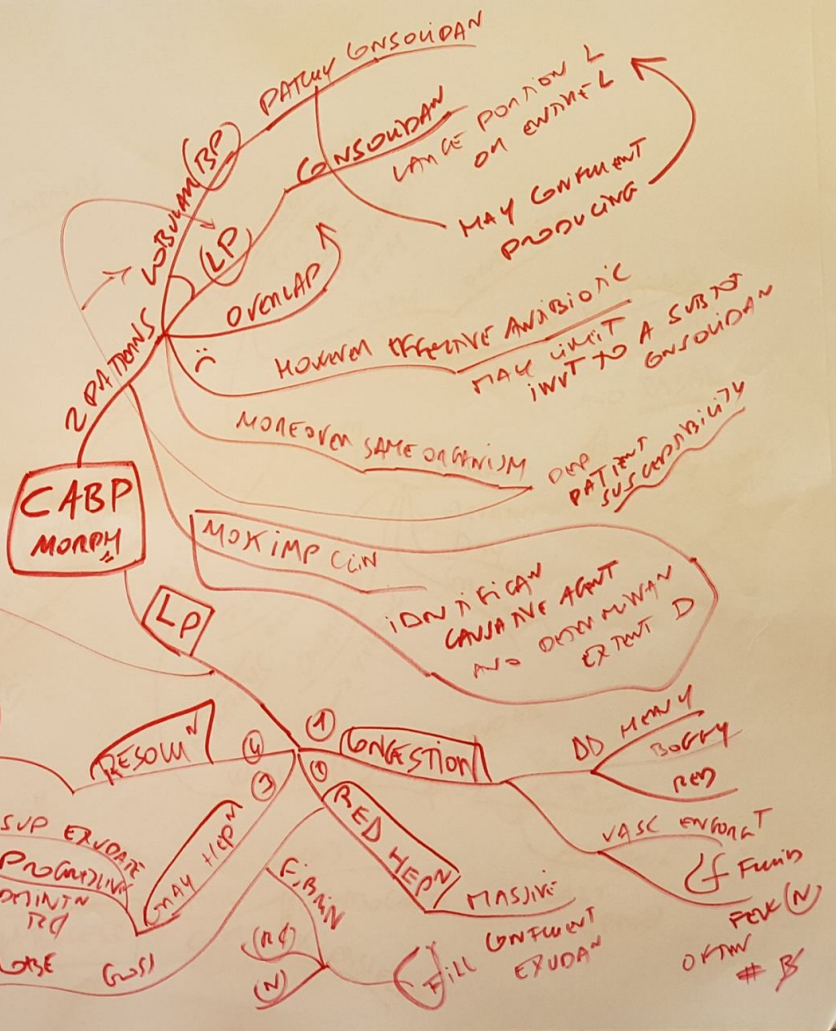
DATE 14
PAGE 108
2022

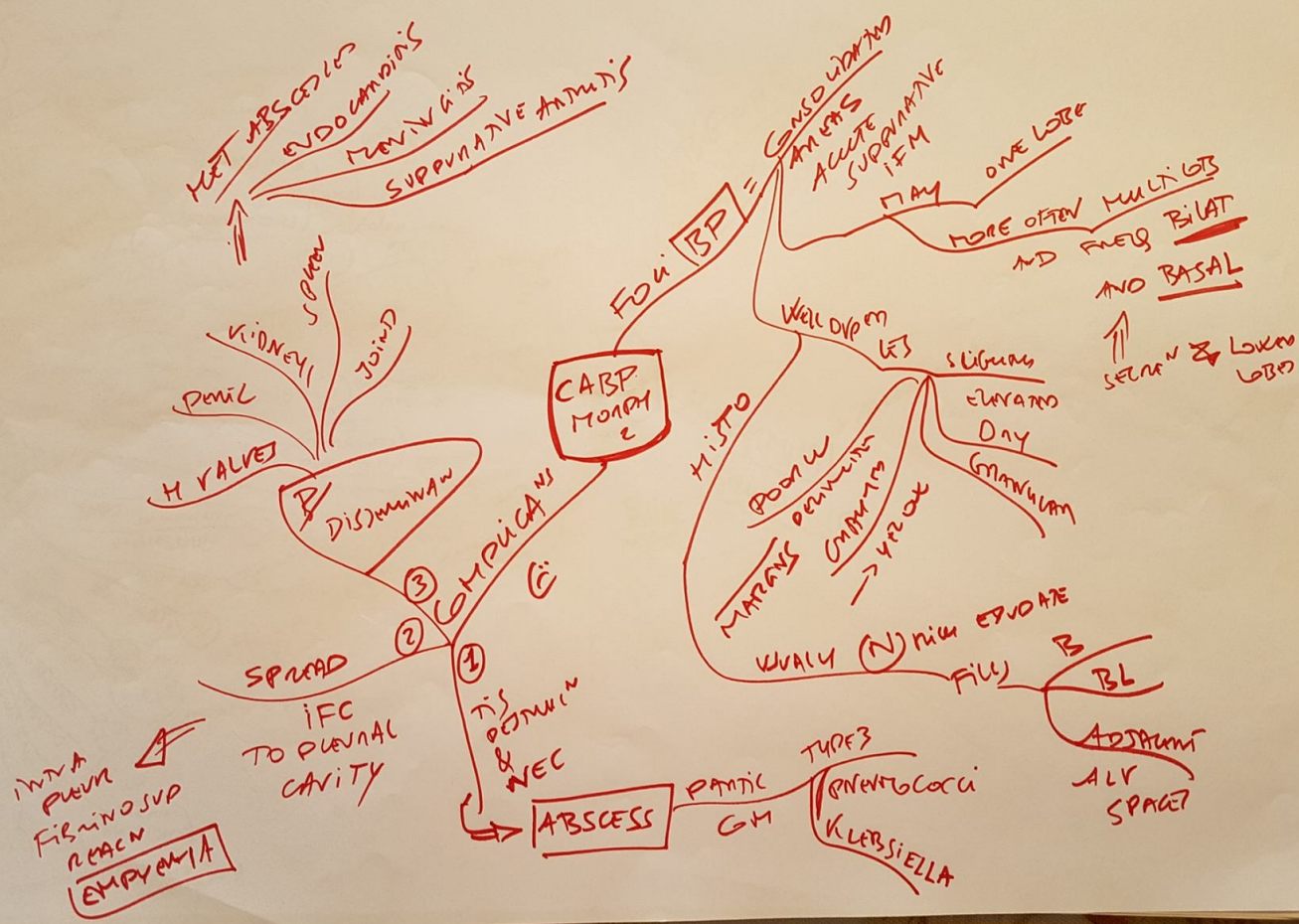


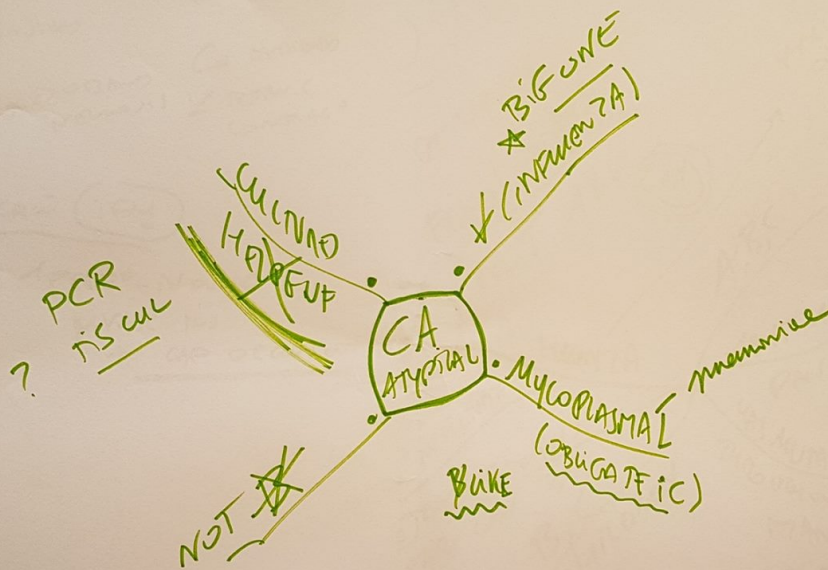


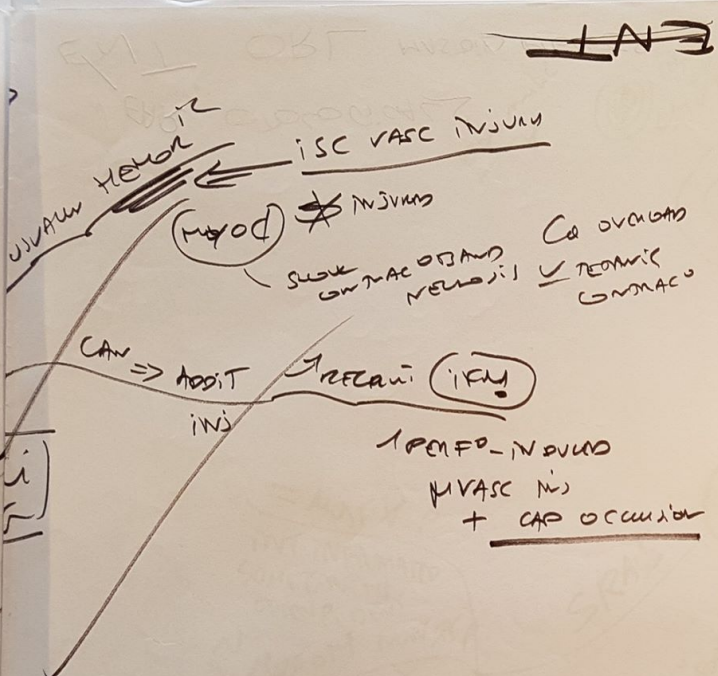
↑ uninvolved Fibrous Tissue on
 old w
 (more of same)

if consolidation extends
 extra (see
 pleurisy)
 may resolve
 often in early
 stages
 Fibrous
 reaction

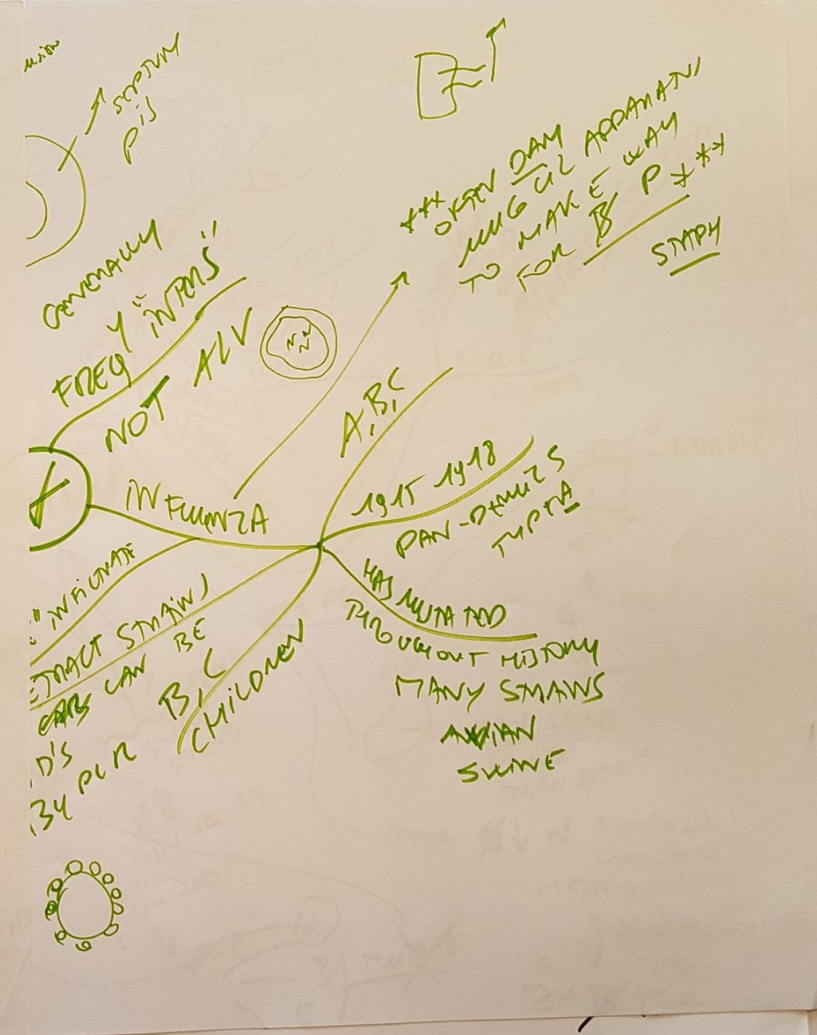


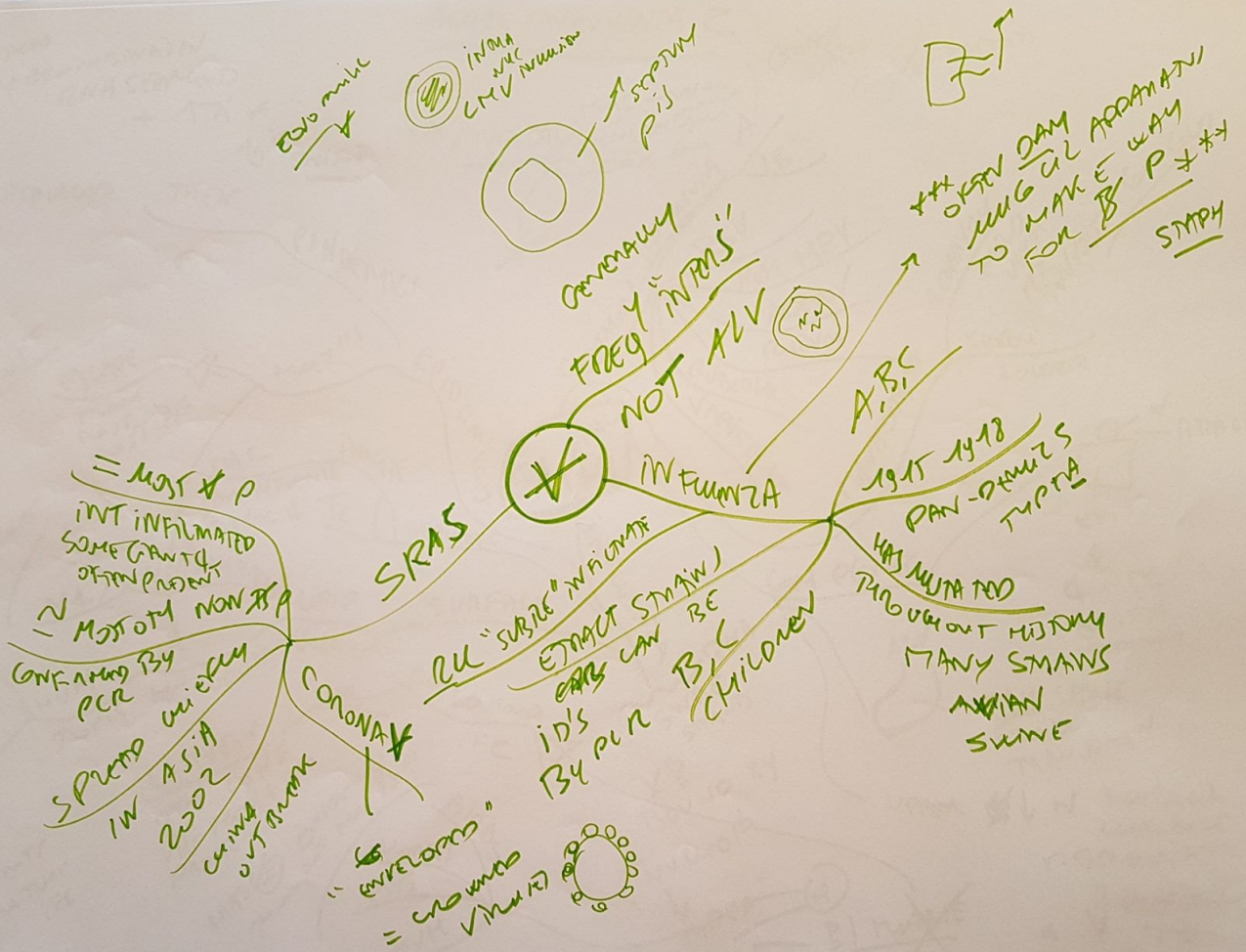




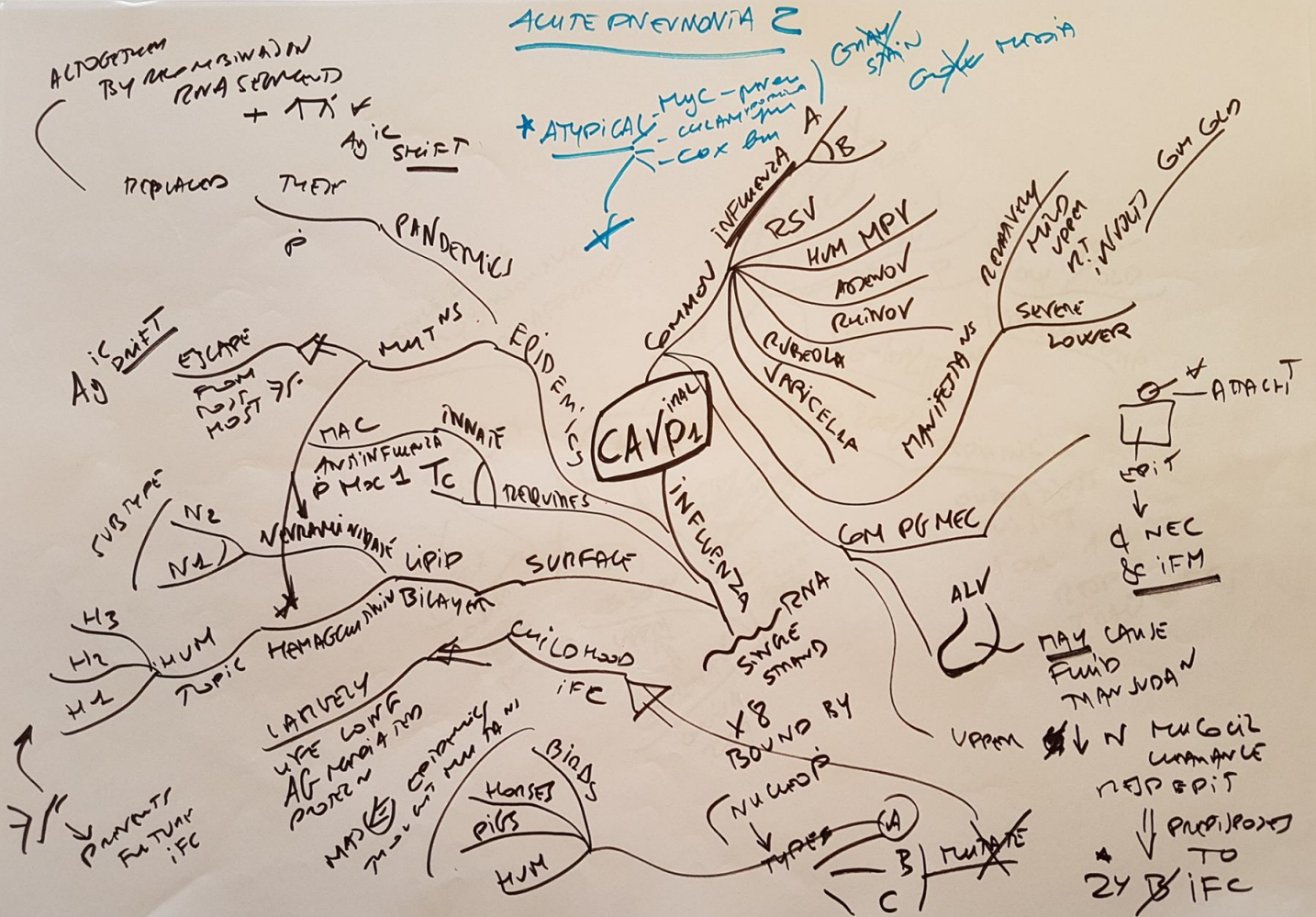


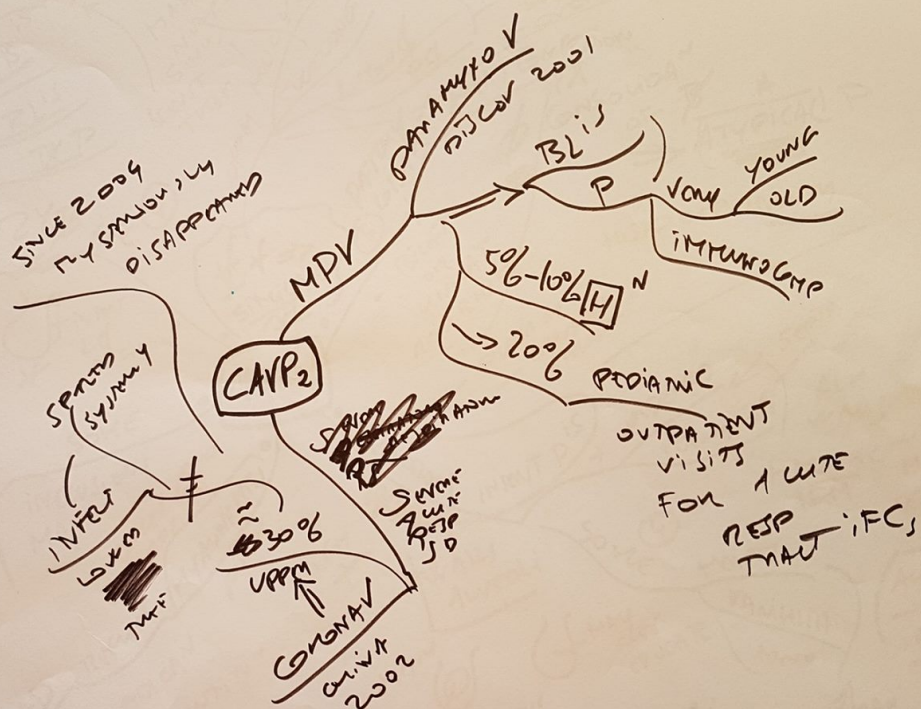
CAVP

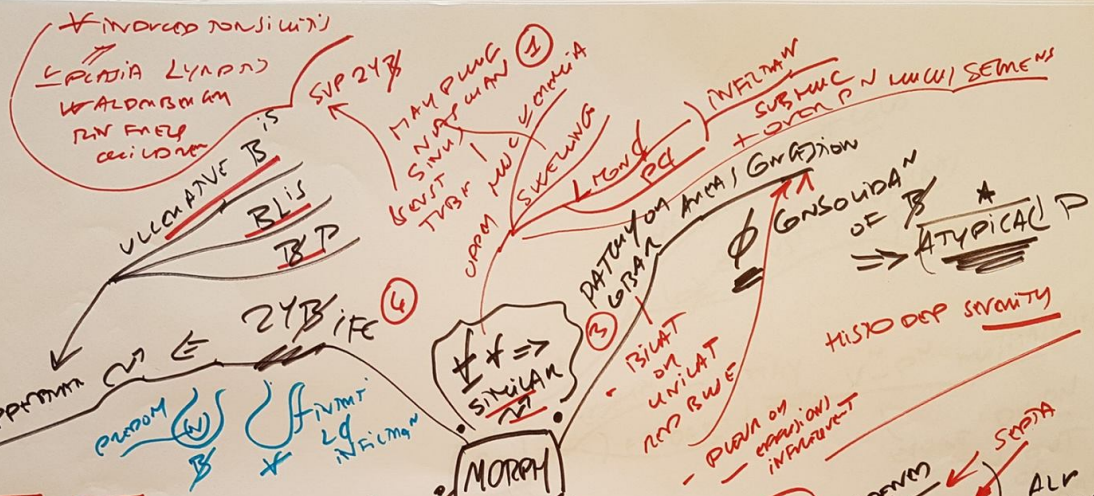




ACUTE PNEUMONIA 2



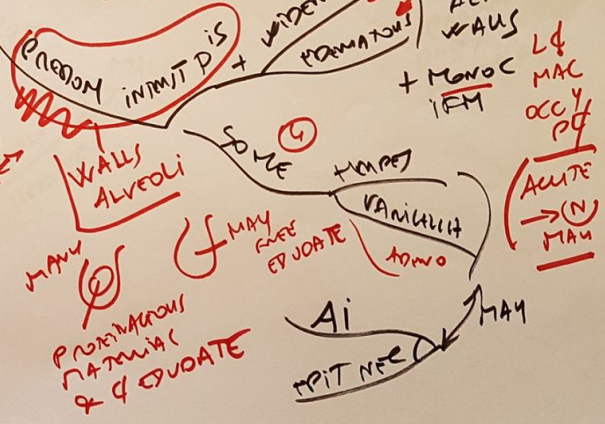


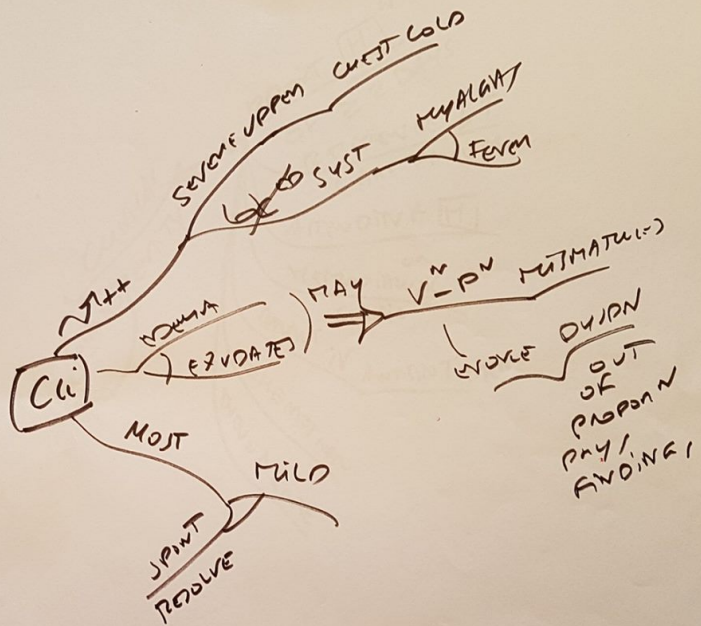


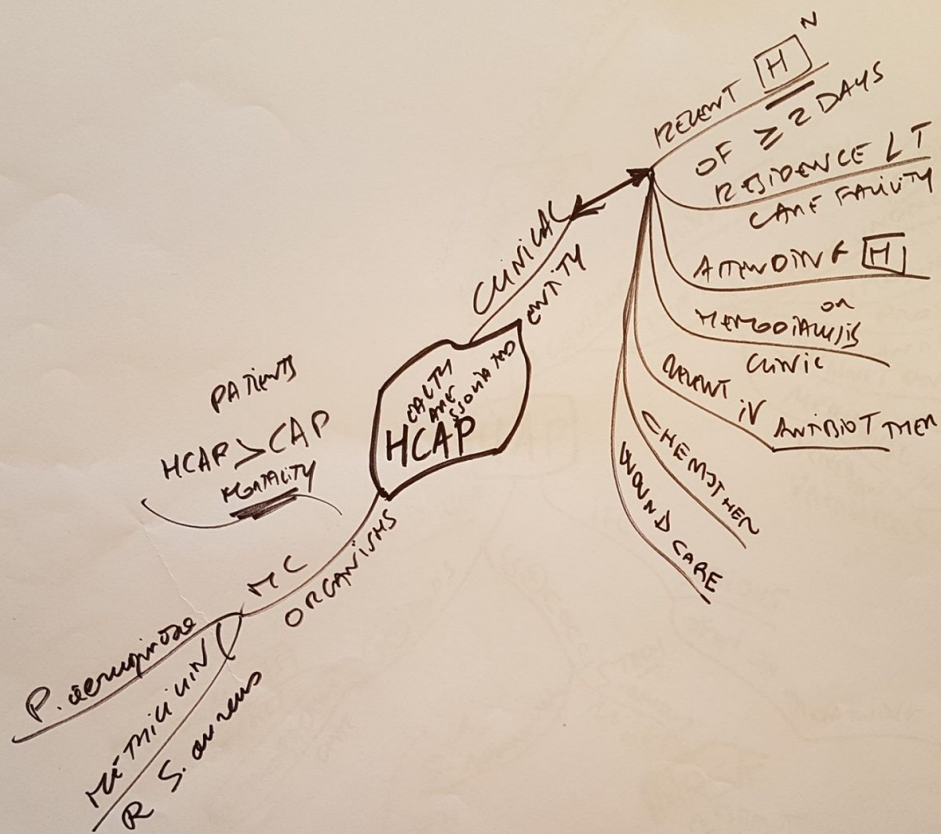
② LARYNGEAL TBIS & BLIS

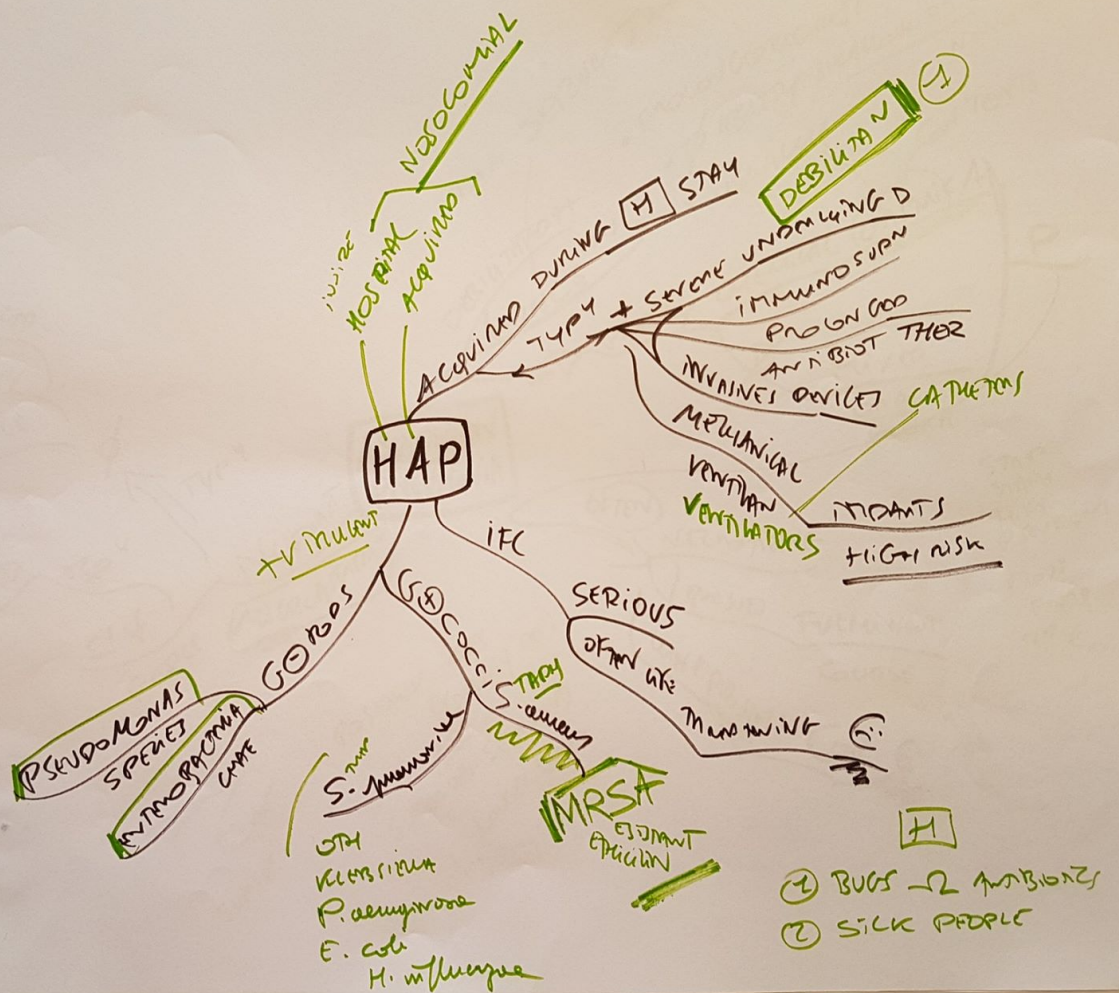
VC SWEETING
 & ++ MUCUS P
 IMPAIRED BILEM
 → B SUPM IFC
 + SUPM
 PUSING SATELLITE
 → FOC ALVEOLITIS
 MAY
 + SOME BL WIDEN PUG
 2Y. 1MM ANK
 BY Q. DEB. FIBRIL & TRACHEA
 → ORG. & FIBROSIS → OBSTRUCTIVE BLIS & PERMANENT DAM

SOME
 CYAN
 WITOP
 CAN
 INCUSIONS
 MAY
 WHEN BY ANK
 DAD TRAPET MYXINEMES
 PINK
 EMPOICAN
 INFLAMMATION









(Neutrophils
macrophages)

for men
poorly
small

+ GERD
ESP 4
N 4
PEOPLE

↑ TYPE 4
N 4
MICROASPIRATION

ASPIRATION PNEUMONIA

- *** SEIZURE ***
- PROLONGED POST
- ABILITY SWALLOW ON ONE
- USUALLY
- CONTENTS

DESLIMATED++
(LUNGS)

PARTLY CHEMICAL
GASTRIC
MIXED
ONAL
FLORA

STIM
STIM
H. Pylori
P. aeruginosa

SEVERE
NECROTIZING
FULMINANT
COURSE
W/NT P. aeruginosa

POSTERIOR LUNG
(GRAVITY AND)
MIC
SUPERIOR SEGMENT
LOWER LUNG

NO
TRUNK
SURVIVE

LUNG ABSCESS

CLIN

- PLEURAL cavity
- HEMOR
- SEPTIC EM
- 24 ANY (100%)

IF NEC

- SUPPURATIVE
- LOC EN

ETIO & PG

ASPIRATION

AMERICAN

SEPTIC

EMBOLIC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

IFC

SUPPURATIVE DESTRUCTION
PARENCHYMA WITHIN
CARET CAVITY

CLINIC

MORPH

CLINIC

MORPH

CLINIC

MORPH

CLINIC

MORPH

CLINIC

MORPH

CLINIC

MORPH

CLINIC

MORPH

CLINIC

MORPH

CLINIC

MORPH

CLINIC

MORPH

CLINIC

MORPH

CLINIC

LARGE POOL OF PUS IN CAVITY
BESID GROSS BLACK
MULTI LOC CAV

= CARCINOMA LUNA

GRANULOMA

GRANULOMA

GRANULOMA

GRANULOMA

GRANULOMA

GRANULOMA

GRANULOMA

GRANULOMA

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GRANULOMA

GRANULOMA

GRANULOMA

GRANULOMA

GRANULOMA

• ANY P WITH ITS SOURCE
AND DRAINAGE
AND IN THE CAVITY
• OF ANY P
C. H.

STAPH

SMAP

NUM

GO

STAPH

SMAP

NUM

GO

STAPH

SMAP

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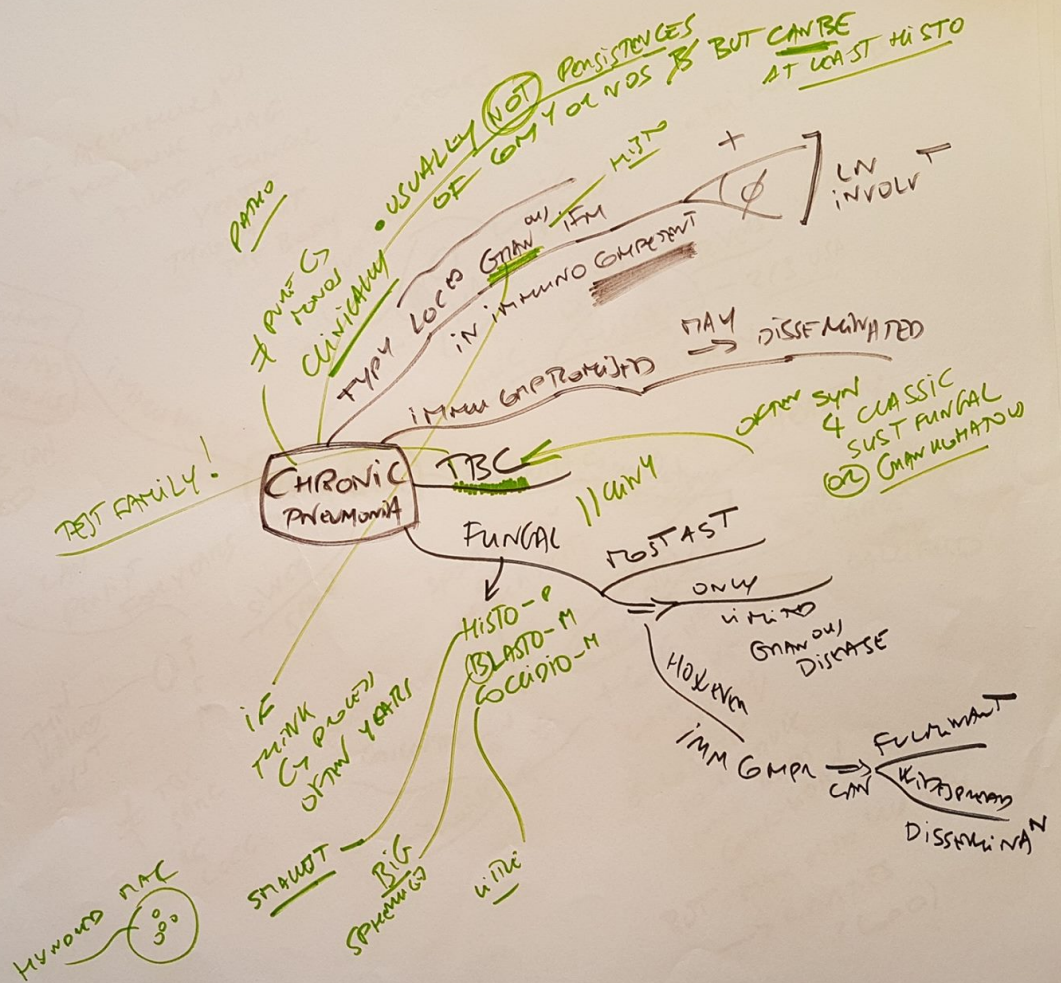
GO

STAPH

SMAP

NUM

GO



• SPORES BIND ON BAT DROPPINGS
 • HIV AIDS TB

~~OVERGROWTH~~
 KOC ACCUMULATE
 MONONUC PHAG
 TILTED + FUNGAL
 YEASTS
 THROUGHOUT
 THE BODY

HUNDREDS
 LIVE
 IN

IC
 PARASITE
 ENDOMIC
 MID
 MISSISSIPPI
 CARIBBEAN
 TRIVIS
 VALLEY
 2/3 USA

HISTOPLASMA

MANY OTT ORGANS CAN
 BE AFFECTED

CAN
 PERSIST
 FOR YEARS

THIN
 WALLED
 YEST
 ≠ TBC
 SARC
 &
 COCC

- CAY
 - CNITO

HISTOPLASMA capsulatum
 SPONTANEOUS
 ON
 DEFECTIVE

TRIGGER

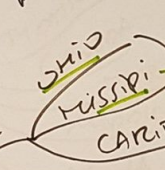
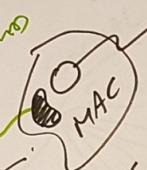
CONCENTRIC
 Co^N +
 Fibroblast

~~GRANULOMA~~
 + GAG NEC
 CASEA N NO
 JUVANY

& GAGS
 TO PRODUCE
 VASCULAR
 GRANULOMA
 BUT MAY ALSO LIQUEFY
 → CAVITIES
 (GPO)

OFFEN
 LARGE
 AND
 CALCIFIED

HEALTHY





HAC → LIMITED ABILITY IN ACT & KILL
⇒ PERSISTENCE
⇒ GN IN LES REC (N)

• SPORING IN SOIL

• MYCETS TB LIKE ALL GRAM POS LUNG D

WORLDWIDE

N HOST
SUPPORT GRAM

BLASTOMYCELOSIS

- CENTRAL
- SOUTHERN
- CANADA
- MEXICO
- MIDDLE EAST
- AFRICA
- INDIA

Budding Budding



OPEN LANCE & CRACKED

BLASTOMYCELOSIS dermatoid
RANGE 5-15 M

LARGE DISTINCT SPERMATOCYTES
COCCIDIO

TRUNK & ARM
DOUBT GRAM POS

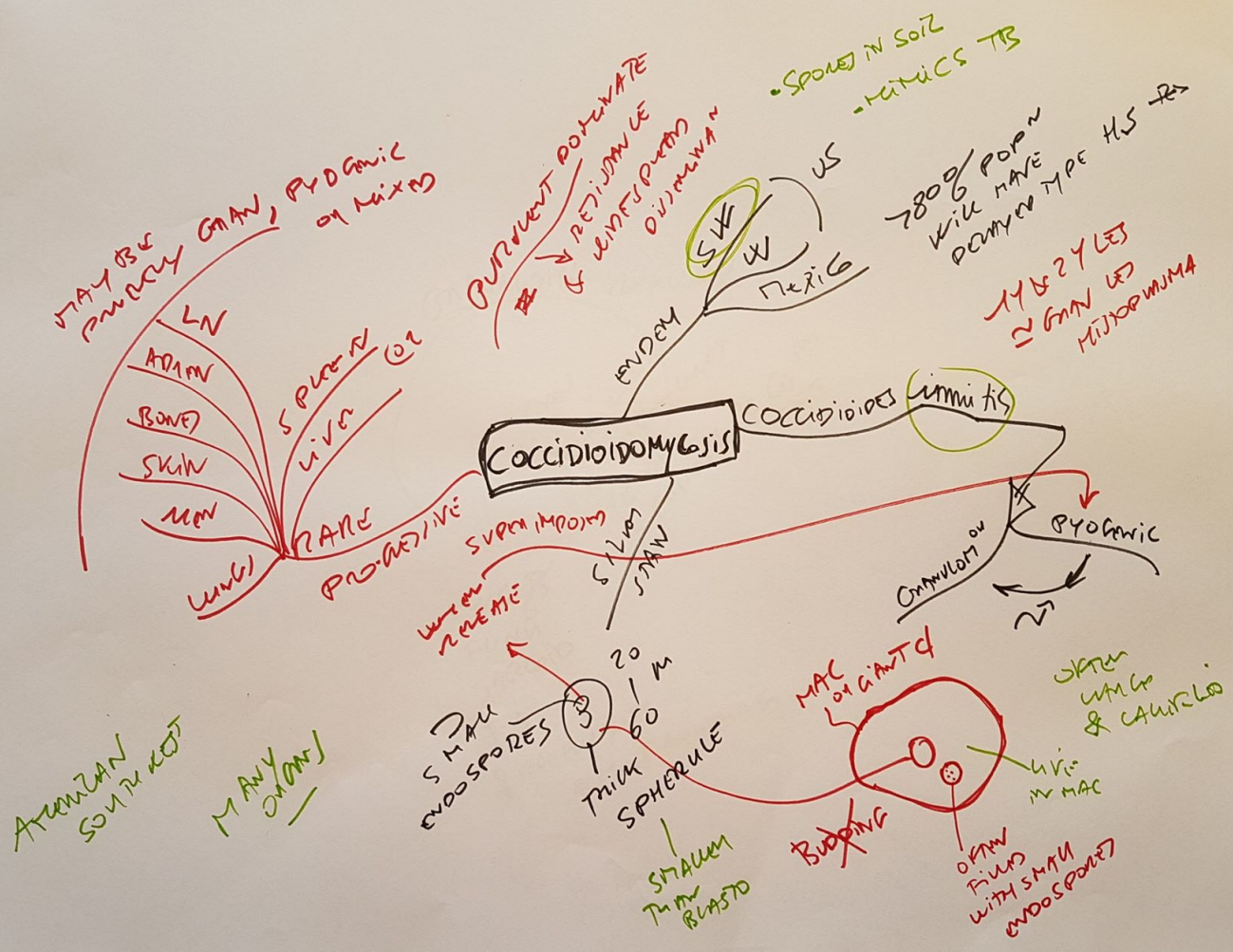
SKIN
11 CUT
SKIN

LARYNX

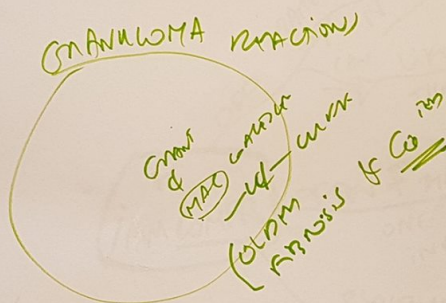
PULM
DISSEMINATED
FOCUS

MANY ON GRAM

MARKED SPIT = PUSHA
MAY RUSTA FM
FOR SPREAD OF CA



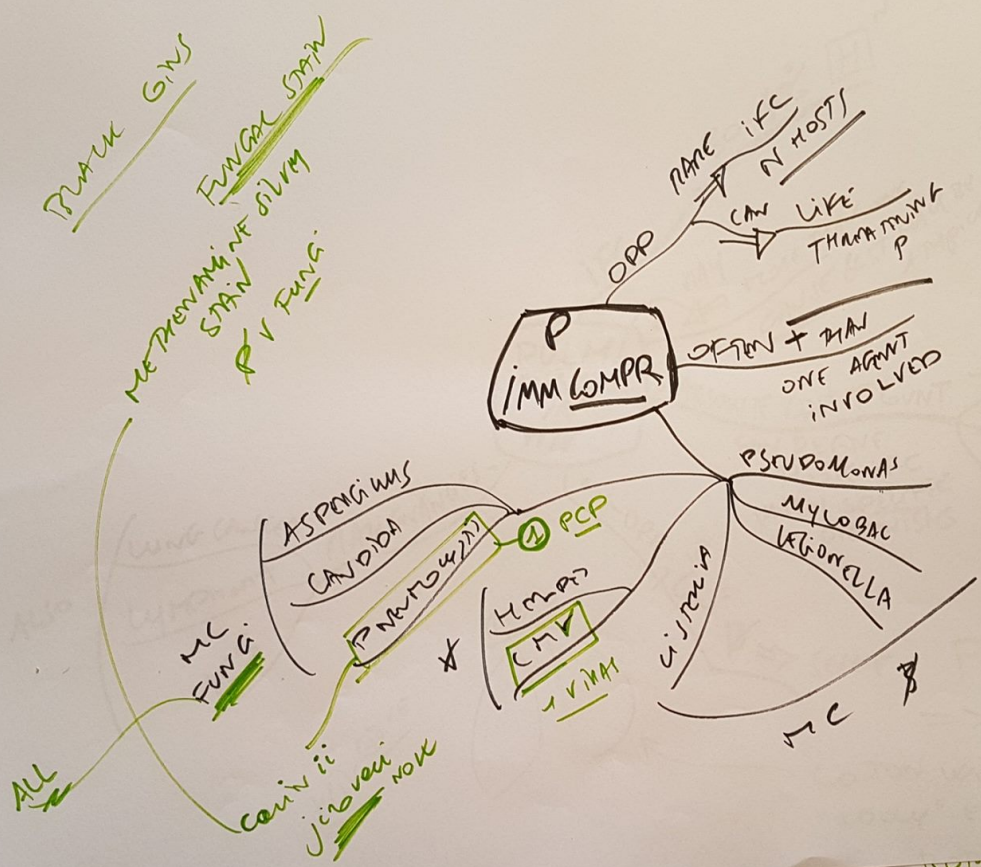
GRANULOMA REACTION

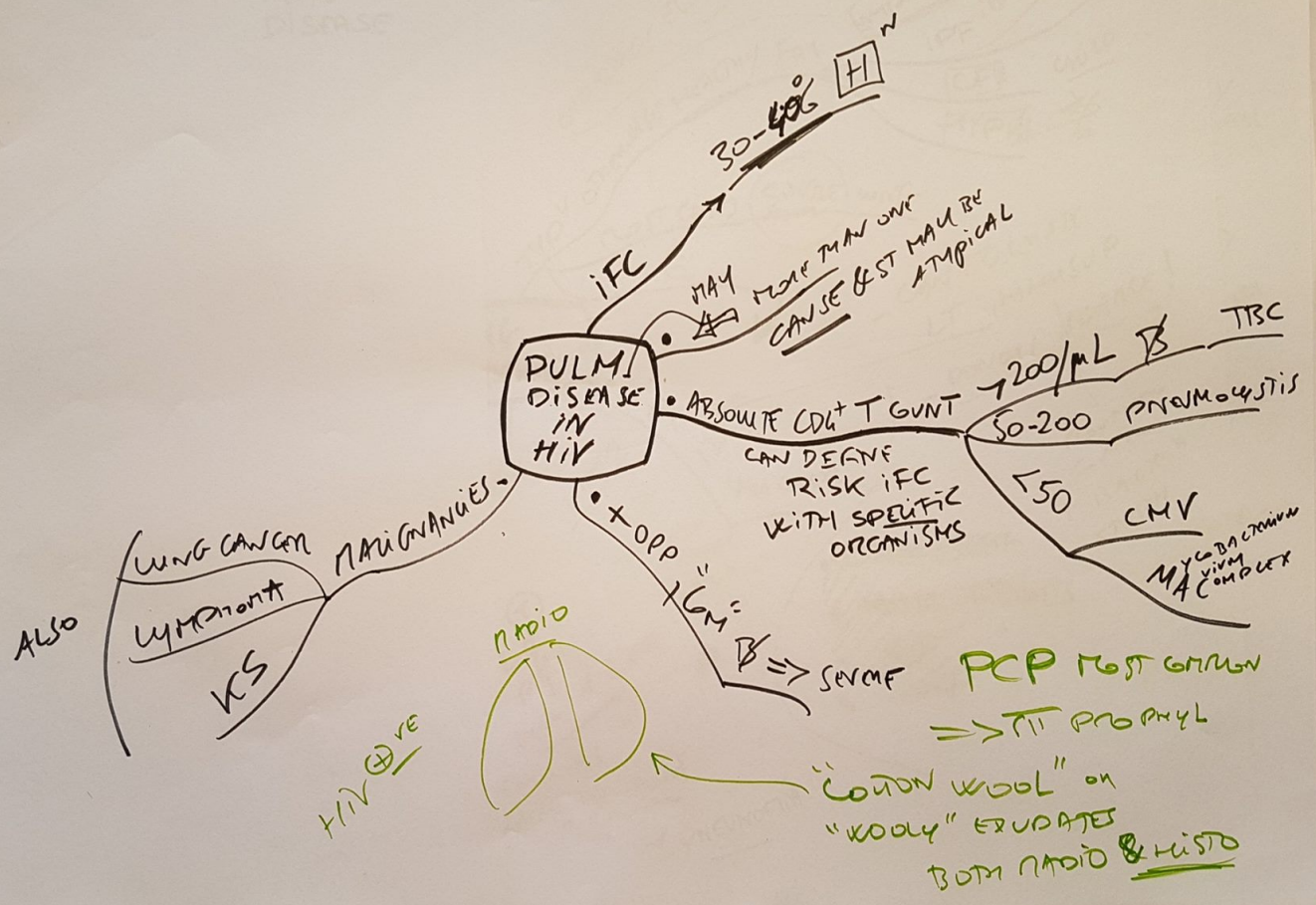


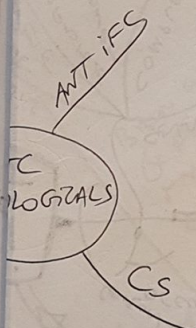
MYC
FUNG
SARCOID

FB

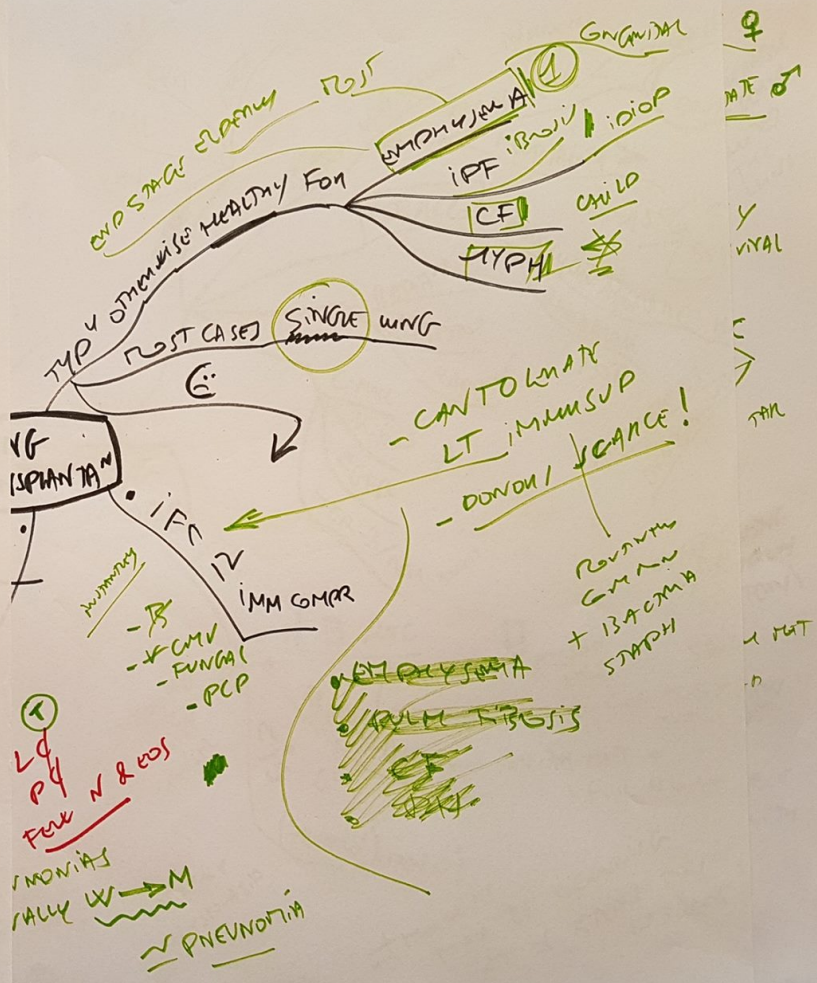
GRANULOMA WITH
ALMOST ANYTHING







LUNG TRANS PLANTATION



Bronchitis & Pulm. Hx
Long standing cases

Survival 1 5 10
Y 79% 53% 30%

LUNG TRANSPLANTATION

Important! + COPD
Active TB

Biopsy
Obstructive

Complete
Partial

ON BOTH

Sub
Tub

around small
VASC &
Airway
Mono NUC
INFILTRATES

PNEUMONIAS
USUALLY W/ M
PNEUMONIA

50% BY 3-5 Y

Occurrence
Small airway

NECROSIS

A

1

summary

- B
- CMV
- FUNGAL
- PCP

TYPE 4 OTHERWISE HEALTHY FOR

POST CASE

6

IFC

IV

IMM OMAR

- CANT OBTAIN LT IMMUNOSUP
- DONOR / RECIPIENT

Recurrent
CMV
+ BACTERIA
STAPH

EMPHYSEMA
PULM FIBROSIS
CF

CHRONIC ELDERLY POST

EMPHYSEMA

IPF

idiop

CF

CHILD

HYPER

CHILD

SINGLE LUNG

GENETIC

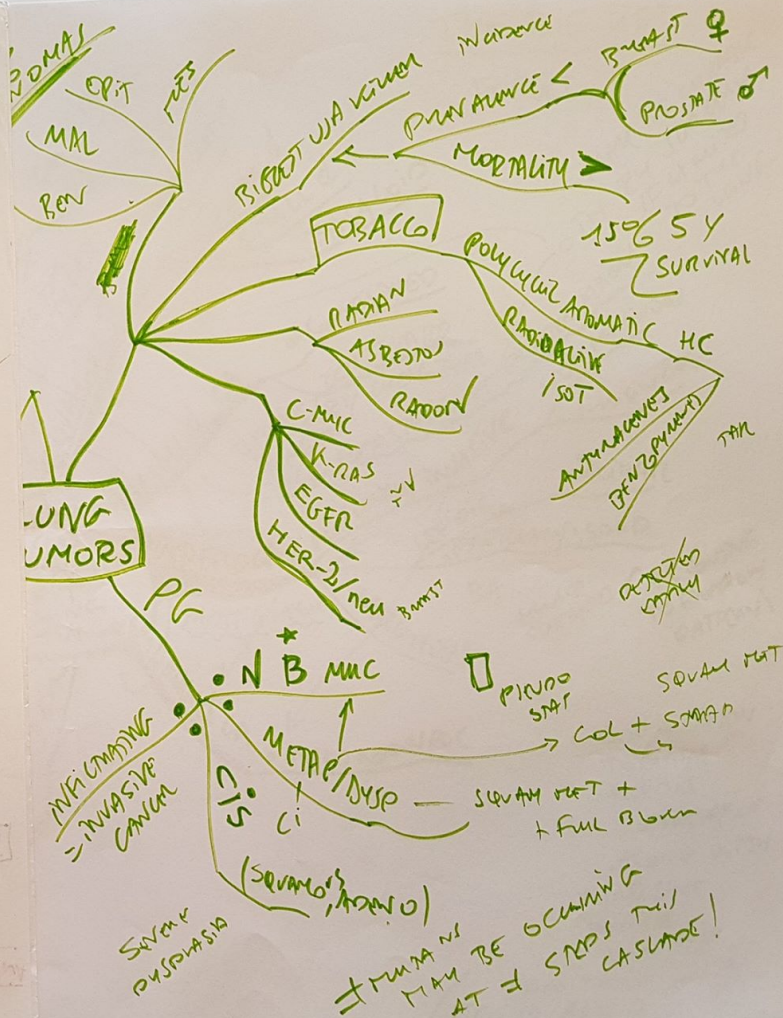
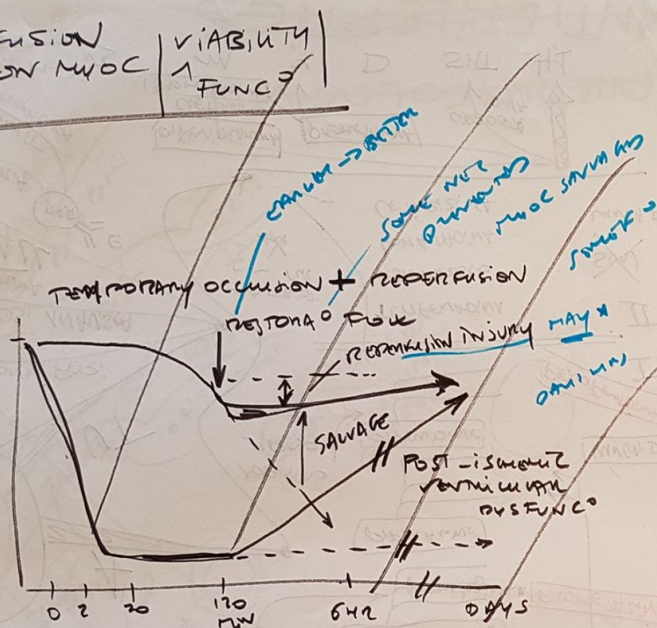
ATE

VITAL

TAL

100%

F TUMORS



LUNG TUMORS

2 TYPES

SCC

HISTOL

NSCC

ADENOC

SQUAMOUS

ADENOC

SQUAMOUS

ADENOC

SQUAMOUS

ADENOC

SQUAMOUS

ADENOC

SQUAMOUS

ADENOC

SQUAMOUS

ADENOC

SQUAMOUS

ADENOC

SQUAMOUS

ADENOC

SQUAMOUS

ADENOC

SQUAMOUS

ADENOC

SQUAMOUS

ADENOC

BUT 90% CARCINOMAS

OPIT

MAL

BOV

FEES

RIBBON VIA VITRUM

INHERENCE

PROLIFERANCE <

MORTALITY >

BRCA1/2 ♀

PROSTATE ♂

15% 5Y SURVIVAL

TOBACCO

RADIAN

ASBESTO

RADON

C-MYC

K-RAS

EGFR

HER-2/neu

BRCA1/2

POLYCYCLIC AROMATIC

RADIOLINE

ISOT

ANTHRACENE

BENZOPHANTHRENE

TAH

DETERIORATION

PIRADO STAT

COL + SQUAM

SQUAM RAT

SQUAM RAT + FULB BLOW

HUMAN NS

FLY BE OCCURRING

AT = SNIP'S TRAIL

CASCADE!

SURVIVAL BUT RESPOND BETTER TO CHEMOT OF MY DRUGS!

NEURO ENDO

NEURO ENDO

NEURO ENDO

NEURO ENDO

NEURO ENDO

NEURO ENDO

NEURO ENDO

NEURO ENDO

NEURO ENDO

NEURO ENDO

NEURO ENDO

NEURO ENDO

GENETIC 2/11

NEURO ENDO

NEURO ENDO

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NEURO ENDO

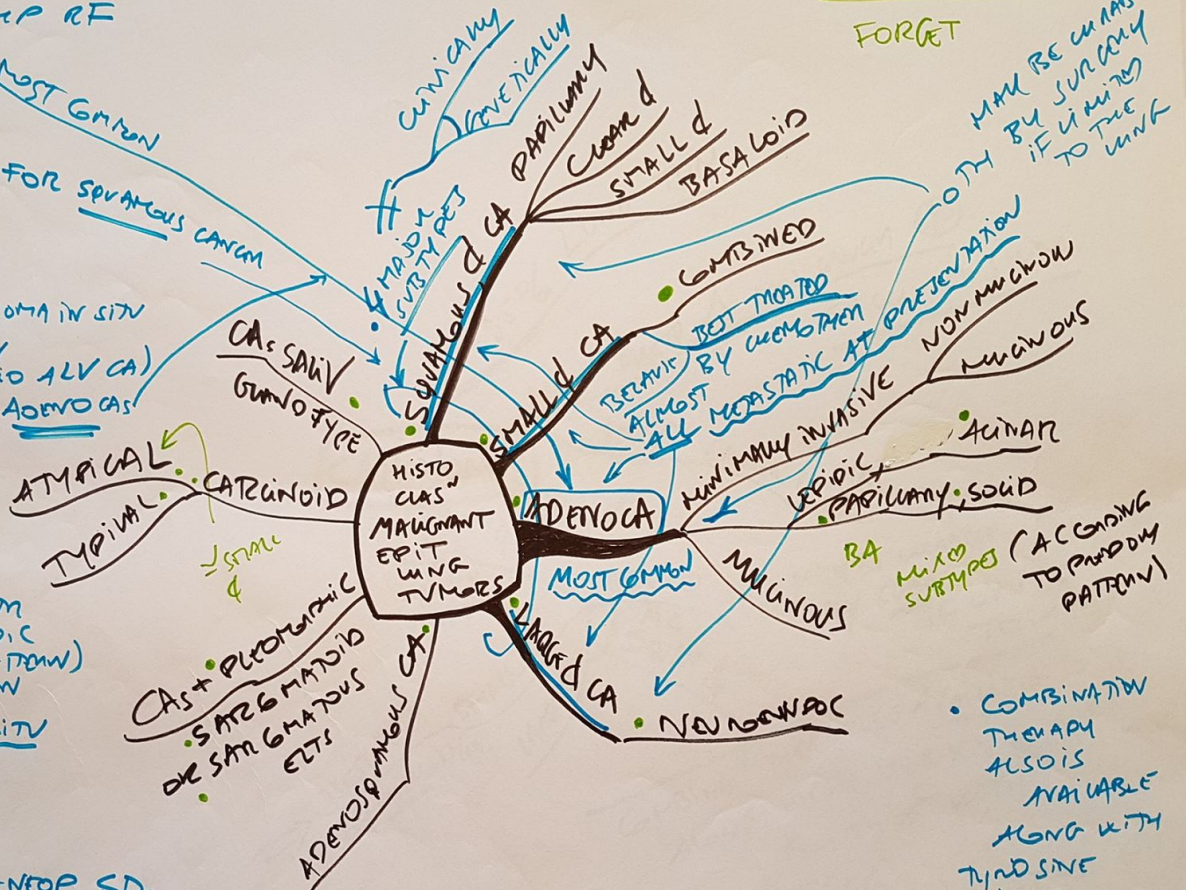
NEURO ENDO

THE BIG LIST

FORGET

MAY BE CURABLE
BY SURGERY
IF LIMITED
TO THE
LUNG

- SHOWING MOST IMP RF
- ♀ & SMOKERS
- PREC LESIONS
 - SQUAMOUS DYSPLASIA FOR SQUAMOUS CANCER
 - ATYPICAL ADENOMATOUS HYPERPLASIA (ADENOCARCINOMA IN SITU) (FORMERLY BRONCHIOALV. CA) FOR ADENOCAS
- TUM < 3CM OR LESS IN Ø
 - CHARACTERIZED BY PURE GROWTH ALONG PREEXISTING SM (LEPIDIC PATTERN)
 - STOMACH INVASION
 - NOW II ADENOCAS IN SITU
- PARTICULARLY SMALL & CAS CAN CAUSE PARANEOPL SDs



- COMBINATION THERAPY ALSO IS AVAILABLE ALONG WITH TYROSINE KINASE INHIBITORS

FOR THOSE WITH EGFR ALK ROS & CERT MUTATIONS

CARCINOMAS

30-95% LUNG TUM

MOST FREQ Δ MAS CANCER $\otimes$
EX CURSE SKIN

MCC CANCER $\times$ $\otimes$

4 MAJ HISTO SUBTYPES
+ CLIN & GENET.

ADENO
MC
SQUAM ϕ

MAY BE CURABLE BY SURG IF LIMITED TO LUNG

BEST III BY CHEMOTHERM

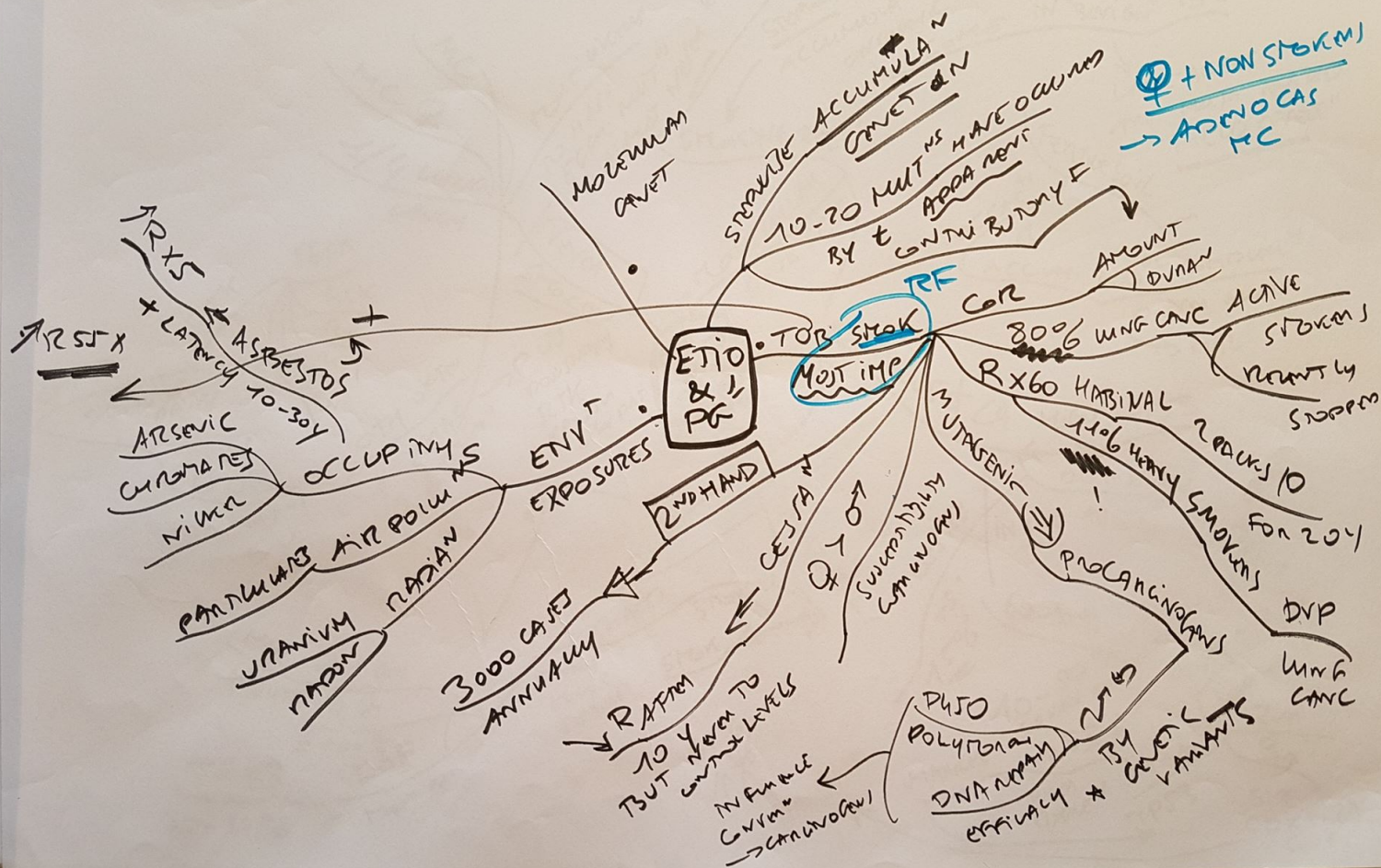
SMALL ϕ LUNG ϕ

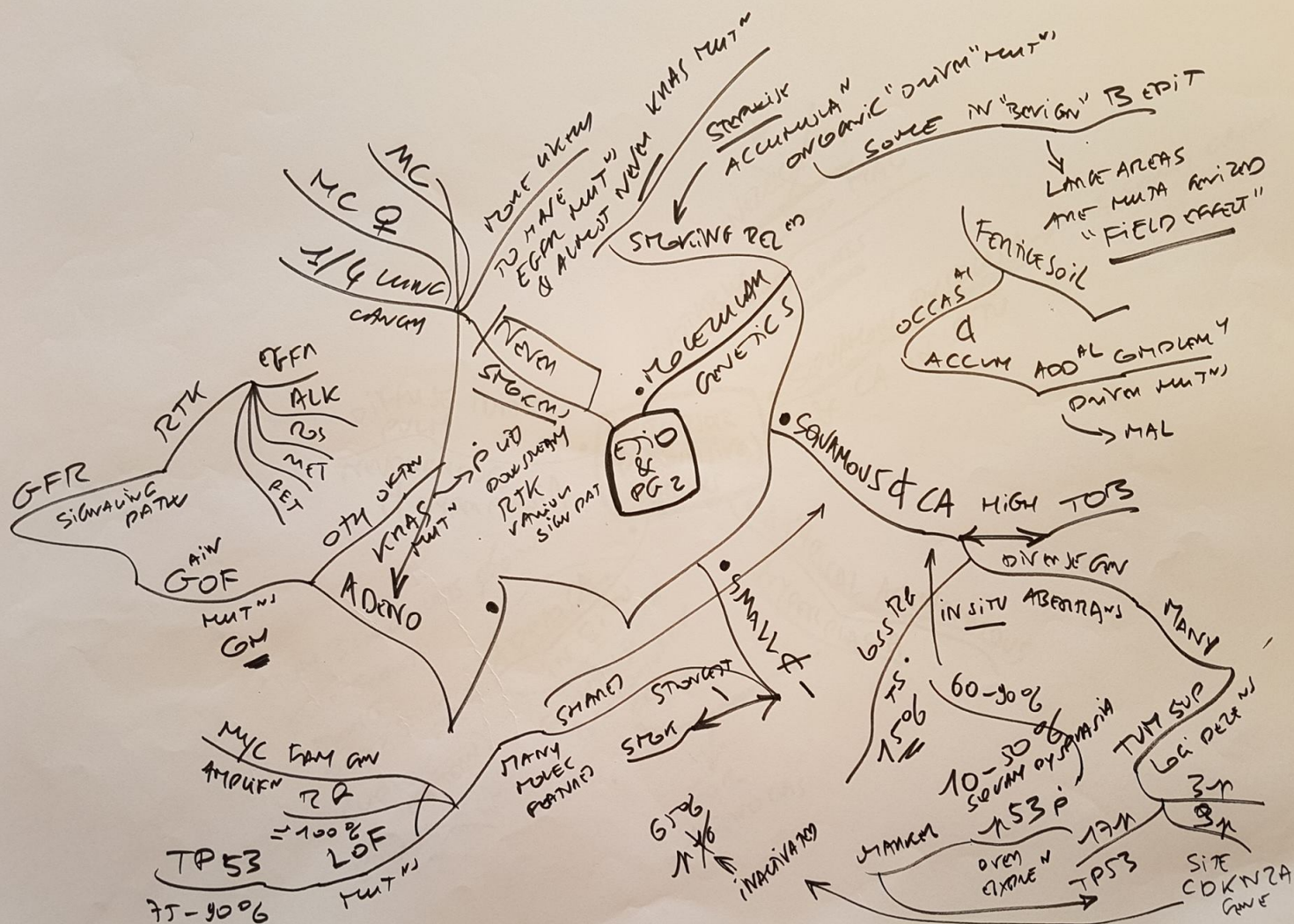
ALL METIC BY QUANTITATION

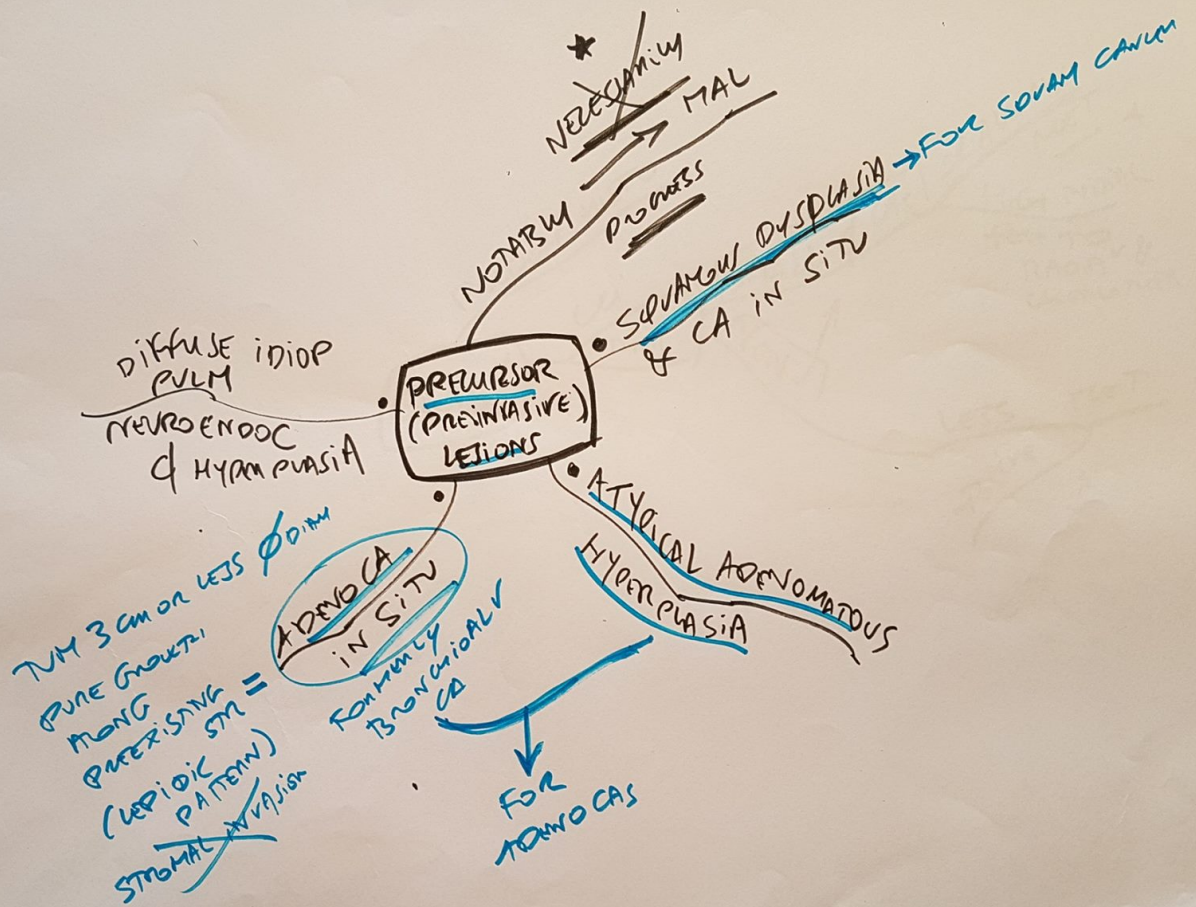
COMBINATIONS ALSO AVAILABLE ALONG WITH TYR KIN $\ominus$ ONs FOR THOSE WITH

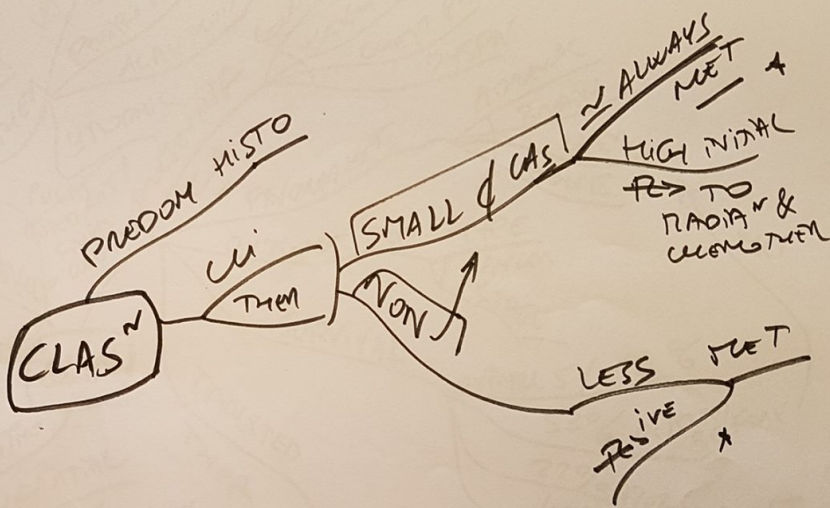
EGFR
ALK
FOS & cMET

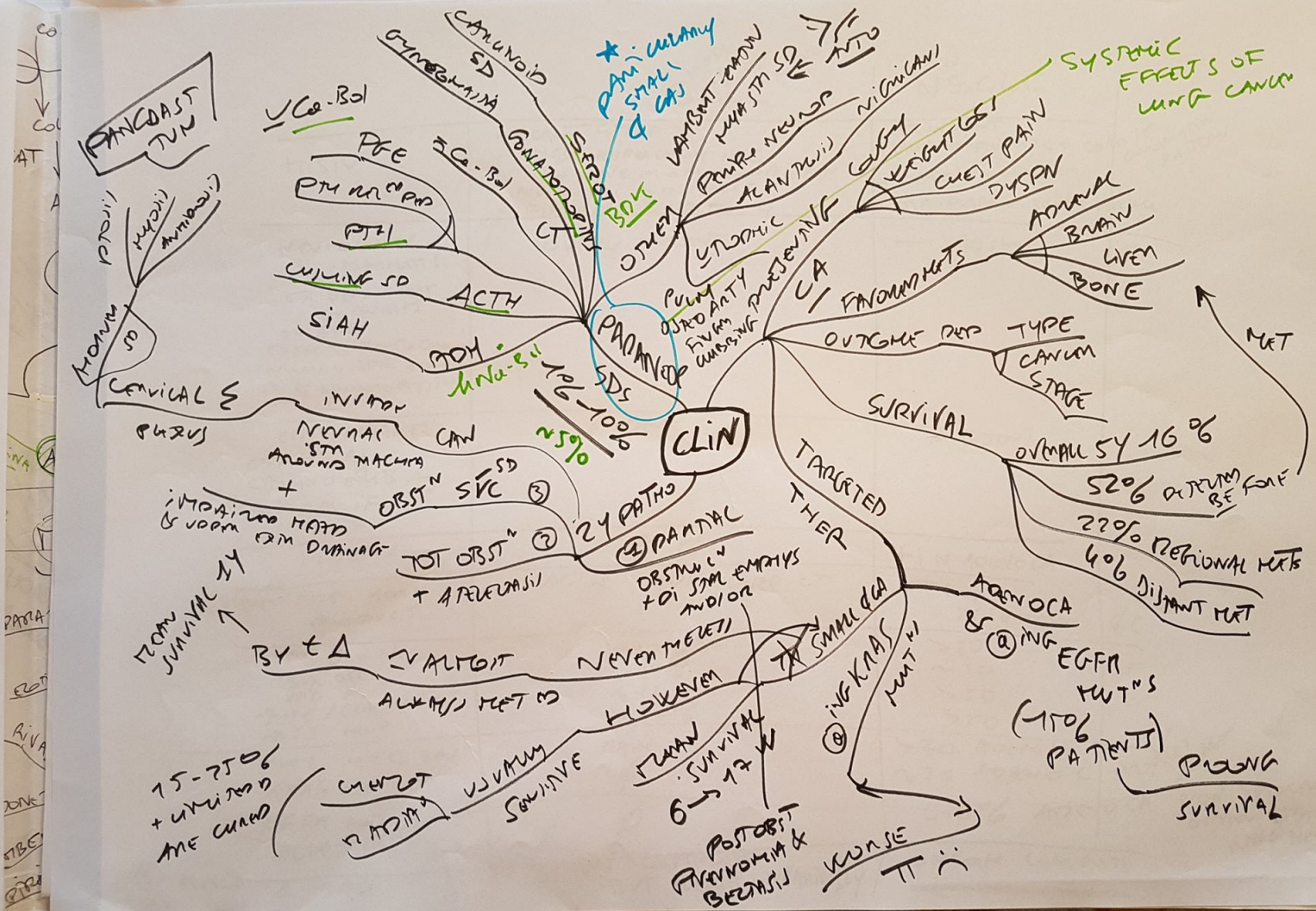
MUTNS









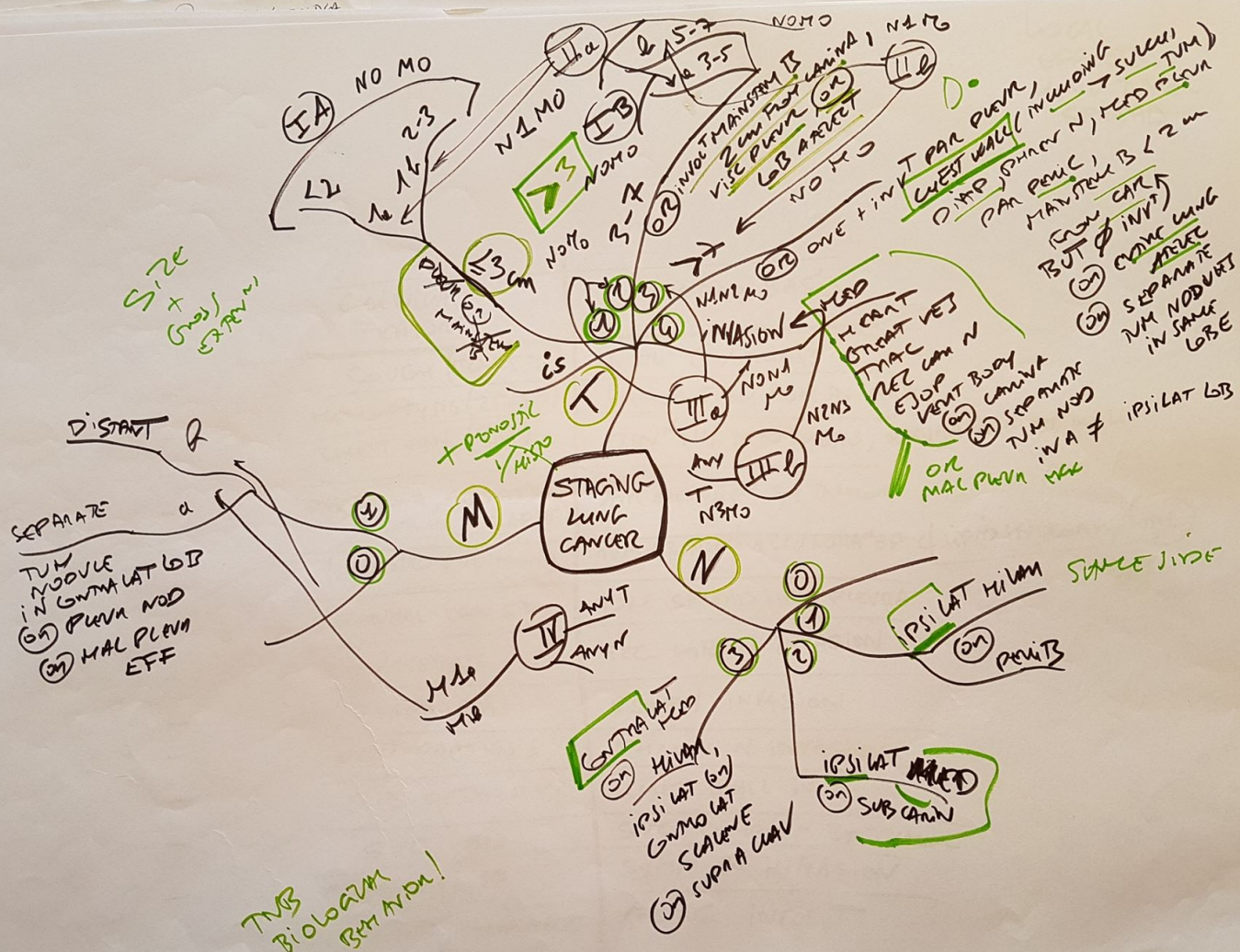


Small Cell Lung Cancer

NSCLC

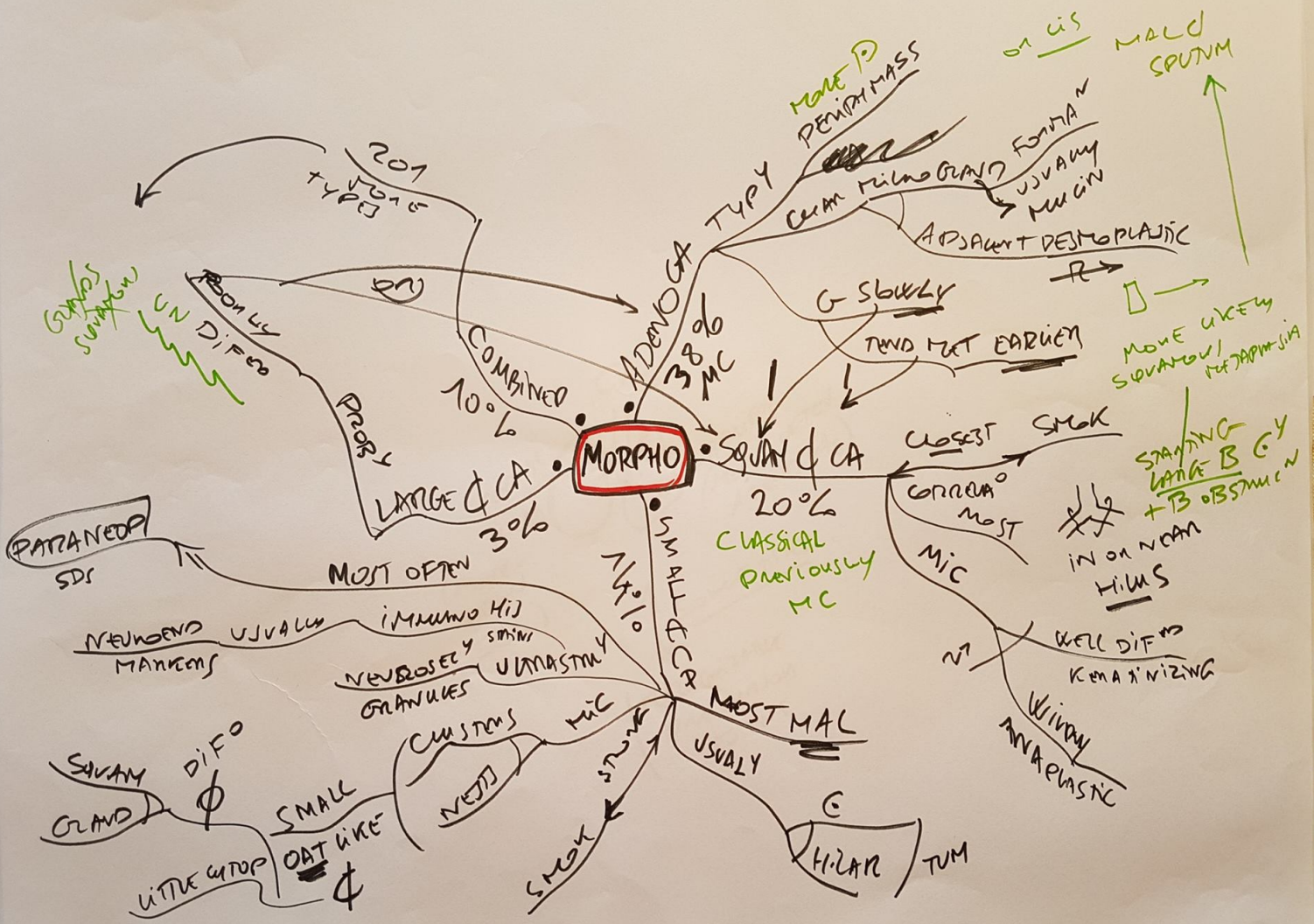
HISTO	- SCANT CYTOL - SMALL HYPERCHROM NUC + TRINE NUCLEOLUS - NUCLEOLI INDISTINCT - DIFFERENT SHEETS	- ABUNDANT - PNEUMONIC NUC + COARSE GRANULAR PATTERN - OFTEN PROMINENT - GLANDULAR or SQUAM ANGI
NEUROENDOC MARKERS EX DN JE GAT ON EM EXAM CHROMOGRAM NUMON SPEC ENOLASE SYNAPTOSYIN	USUALLY PRESENT	ABSENT
OPT MARKER / OPT MB A CAUDAL SUB A SWITCH IF	PRESENT	PRESENT
MUCIN	ACTH ADH GRP CT	+ IN ADENOC
PERDIE HORM POORLY		PTN IN SQUAM, C
TSG & N 3p del p16 mut p16 / CDKN2A mut p53 mut	> 90% ~ 90% ~ 10% > 90%	> 80 ~ 20 > 50 > 70
POOR GWC ON KRAS mut	RARE	> 30 ADENOC ~ 20 ADENOC
EGFR mut ALK mut		4-6% ADENOC
A) HAND & RAD	OFTEN COMPLETE BUT REMAIN INVARIABLY	UNCOM COMPLETE

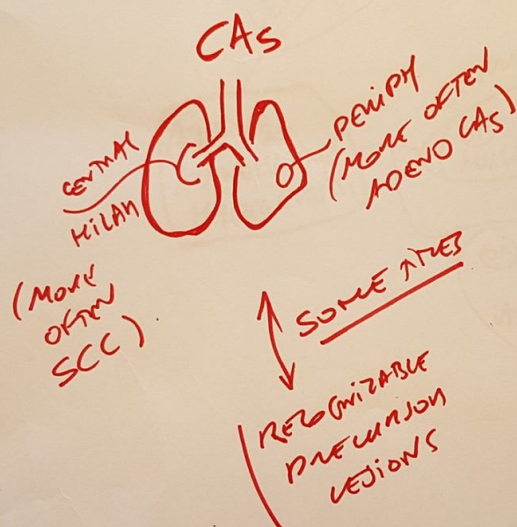
NON SQUAM
OFTEN SIGMET
WITH METAST

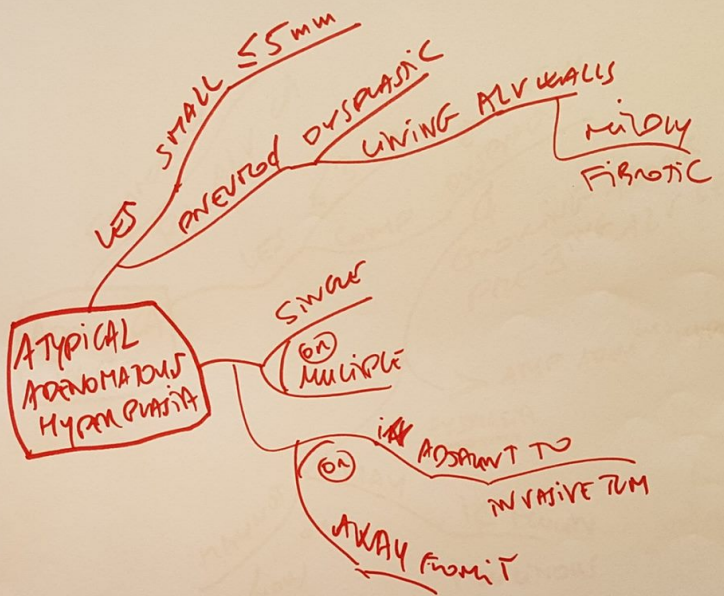


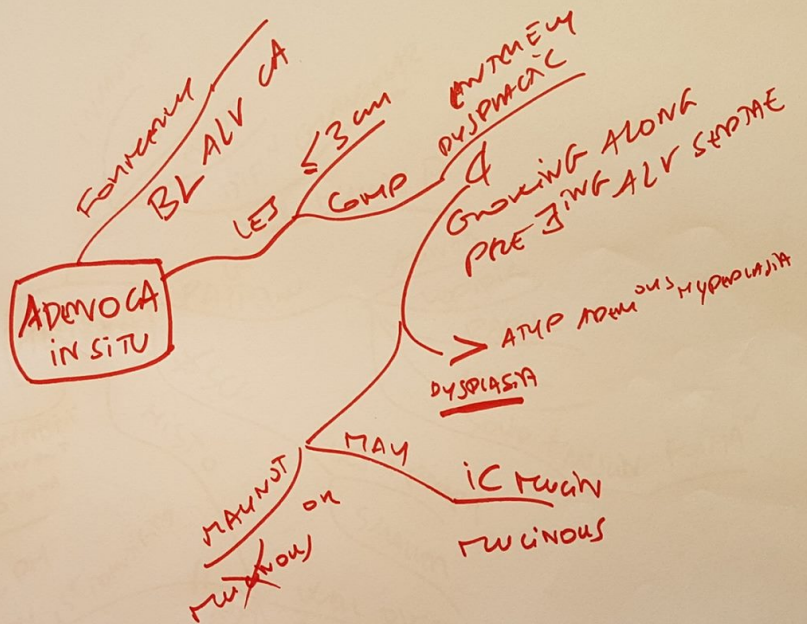
LOCAL
EFFECTS
LUNG TUMOR
SPREAD

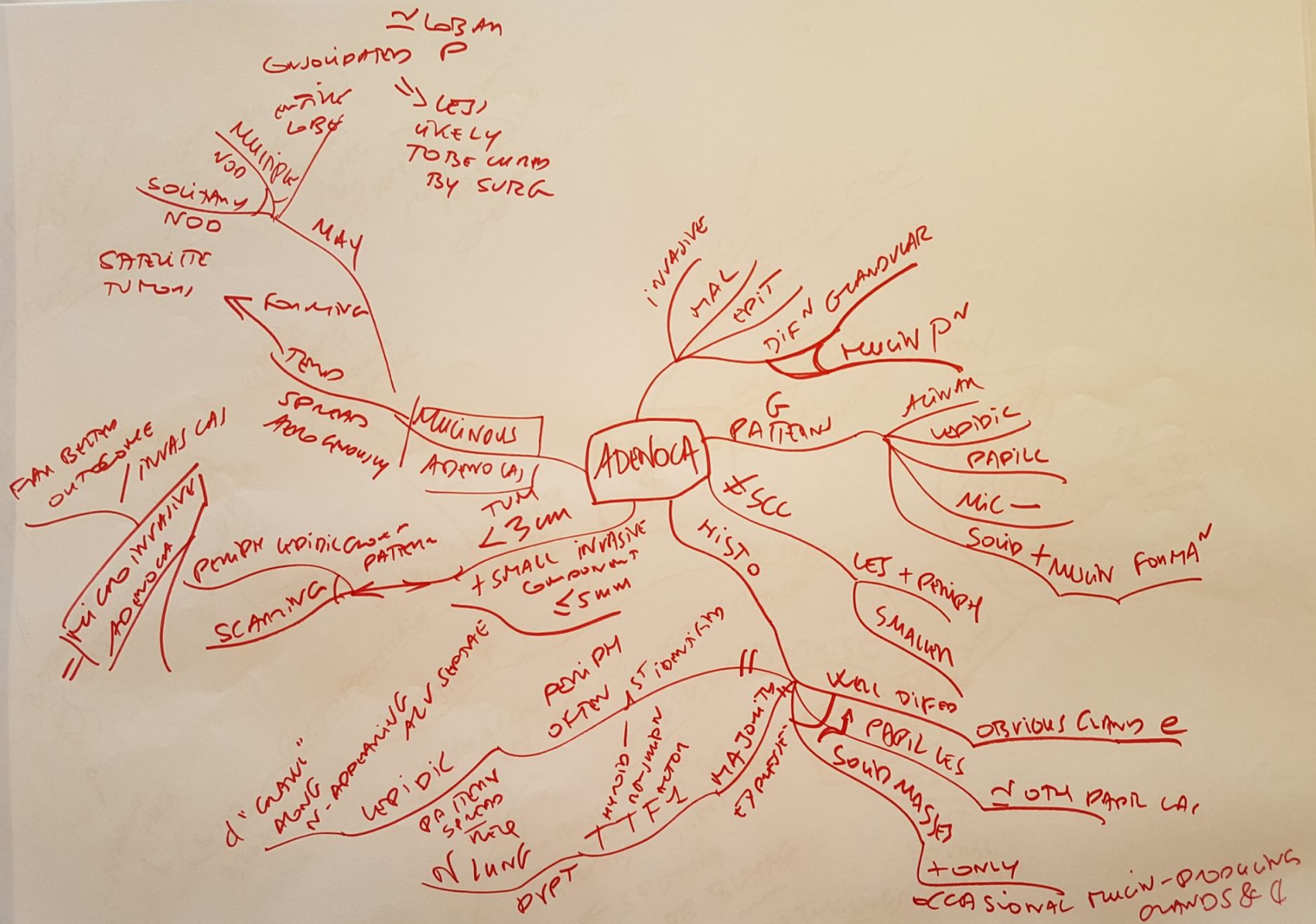
CLINICAL FEATURE	PATHO BASIS
COUGH (50-75%)	INVOLVEMENT OF AIRWAYS
HEMOPTYSIS (25-50)	HEMORRHOGE FROM TUMOR IN AIRWAY
CHEST PAIN (20)	EXTENSION INTO MEDIASTINUM, PLEURA & CHEST WALL
PNEUMONIA, ABSCESS LOBAR COLLAPSE	AIR DESTRUCTION BY TUMOR
<u>LIPID PNEUMONIA</u>	TUMOR OBSTRUCTION, ACCUMULATION OF LIPID IN ALVEOLI (MAC)
PLEURAL EFFUSION	TUMOR SPREAD INTO PLEURA
HOARSENESS	RECURRENT LARYNGEAL N INVASION
DYSPHAGIA	ESOPHAGUS INVASION
DIAPHRAGMATIC PARALYSIS	PHRENIC N INVASION
RIB DESTRUCTION	CHEST WALL INVASION
SVC SD	SVC COMPRESSION BY TUMOR
HORNER SD	SYMPATHETIC N INVASION
PERICARDIITIS, TAMPONADE	PERICARDIUM INVOLVED

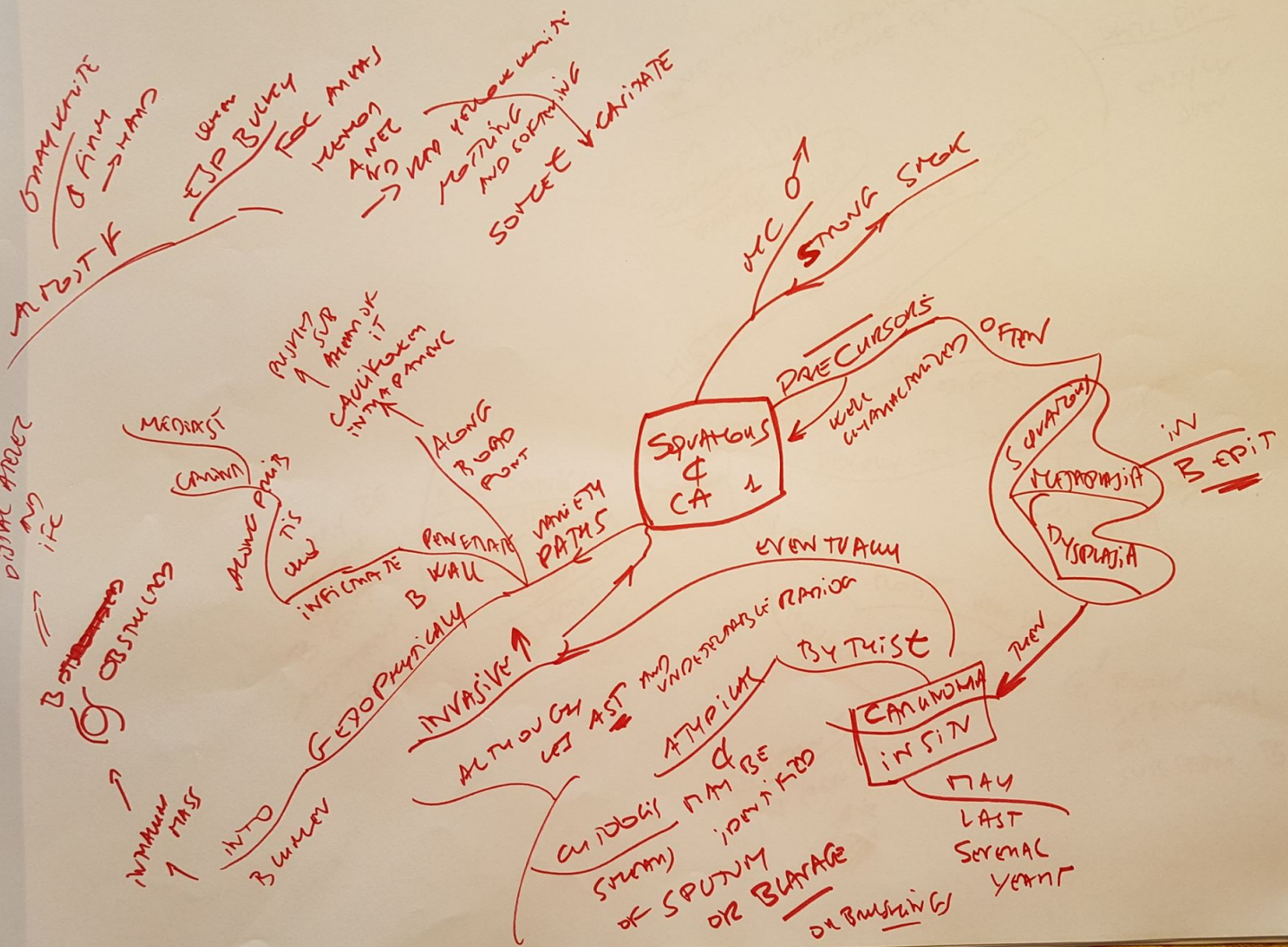


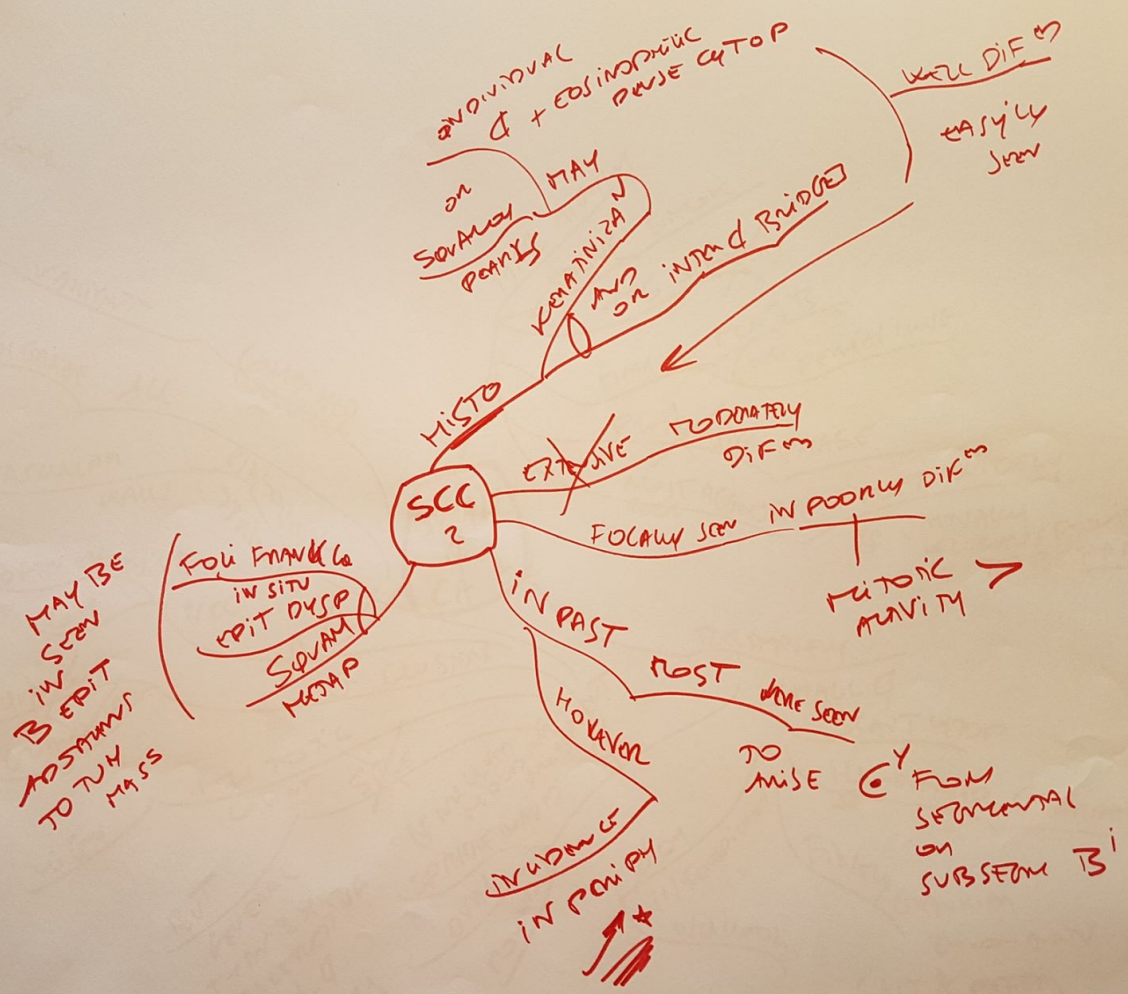


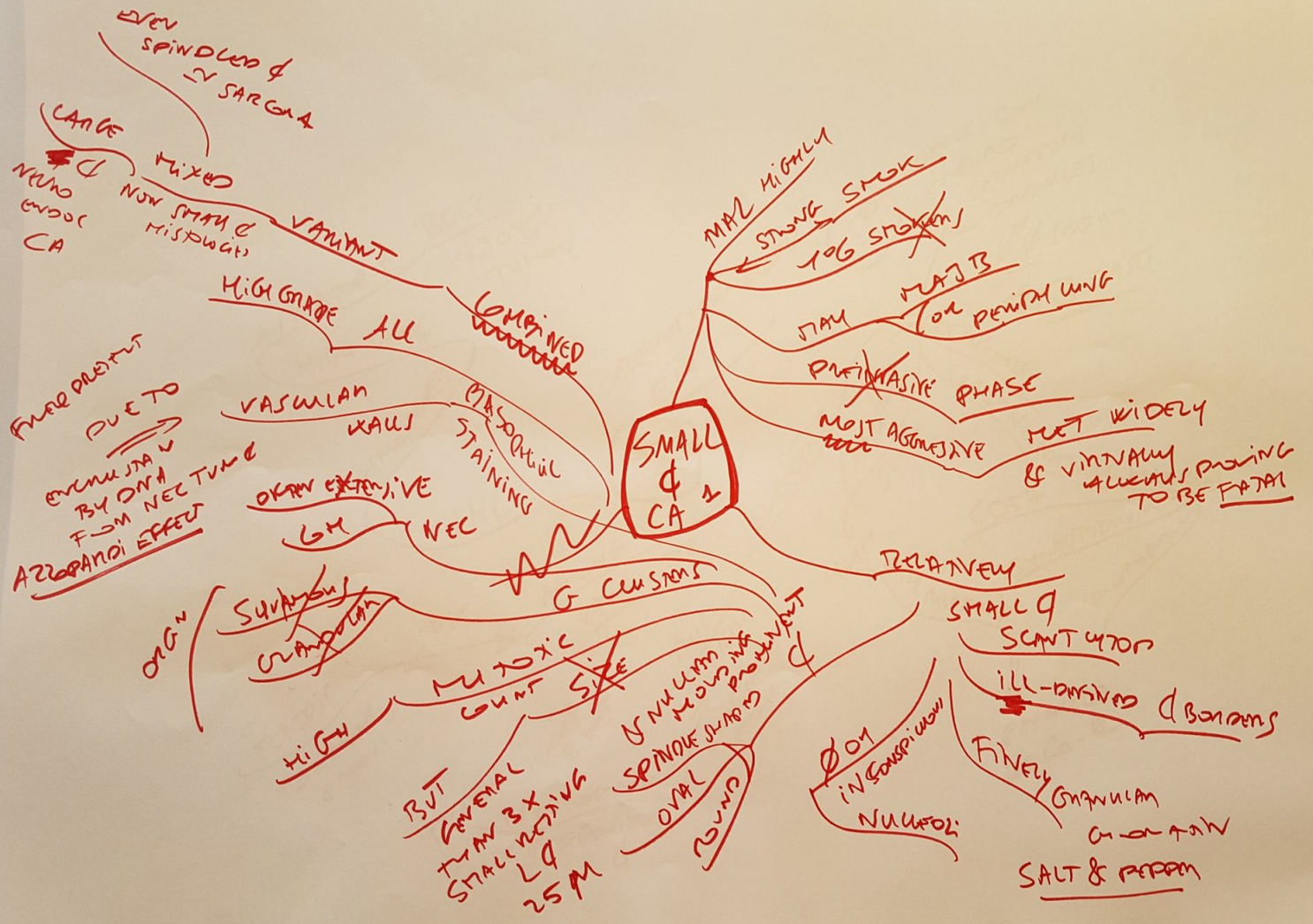


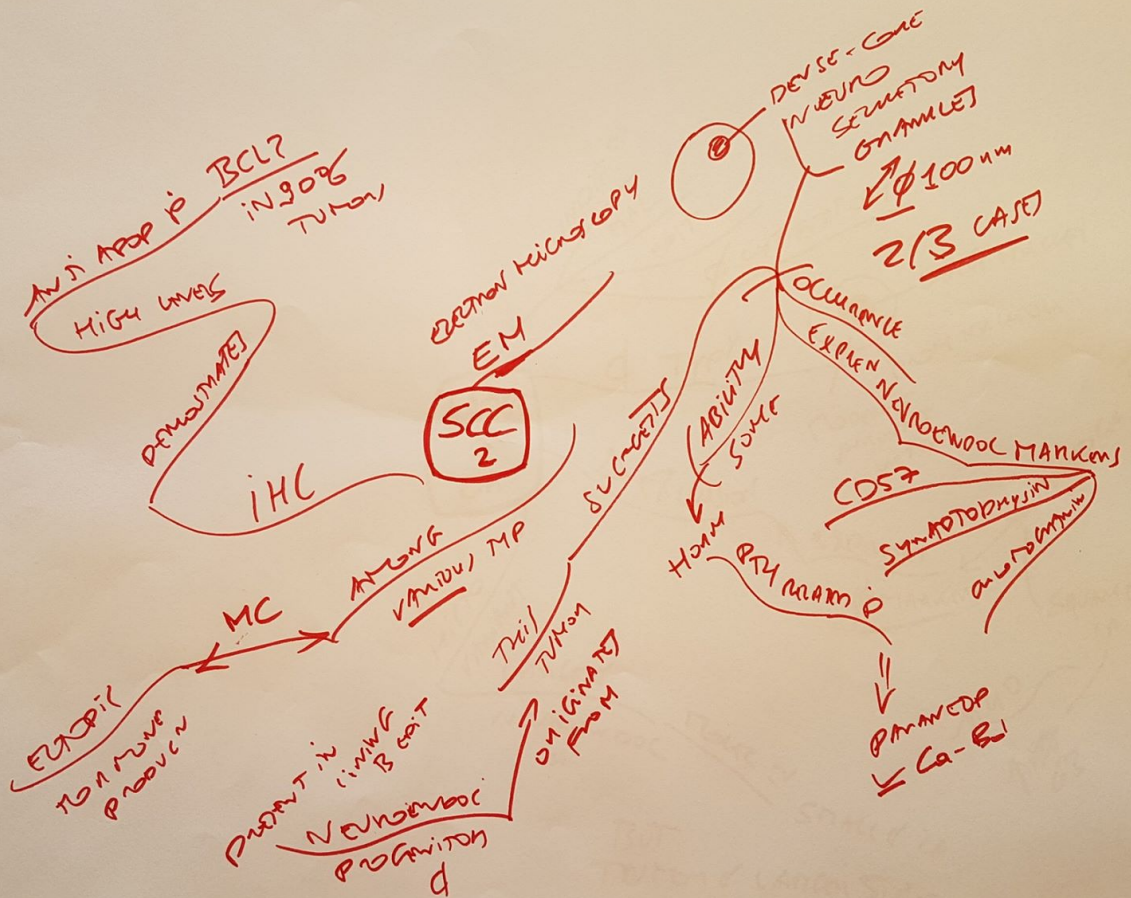


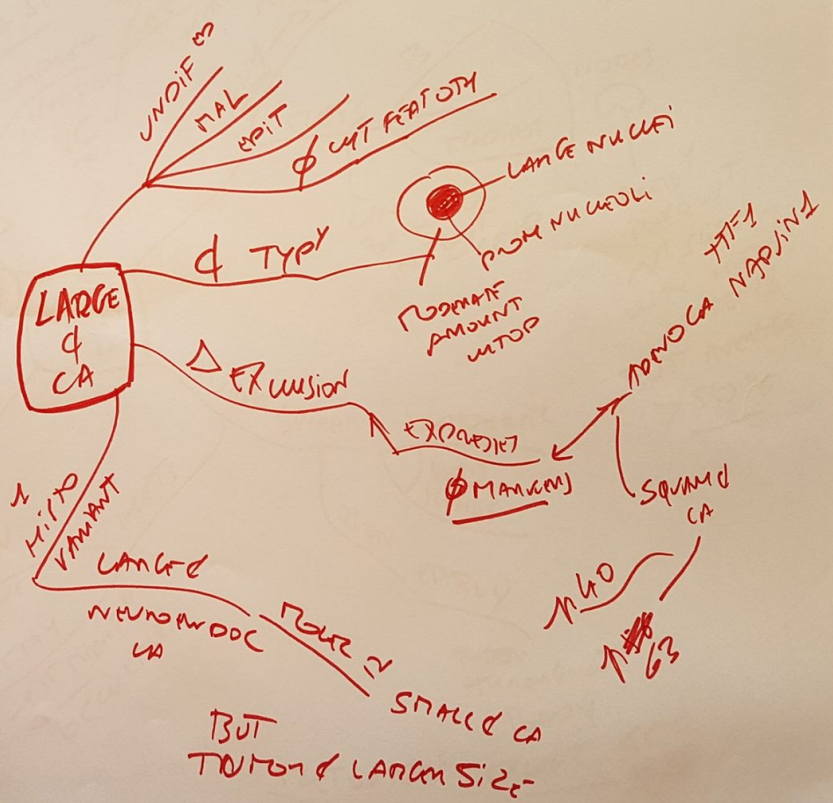


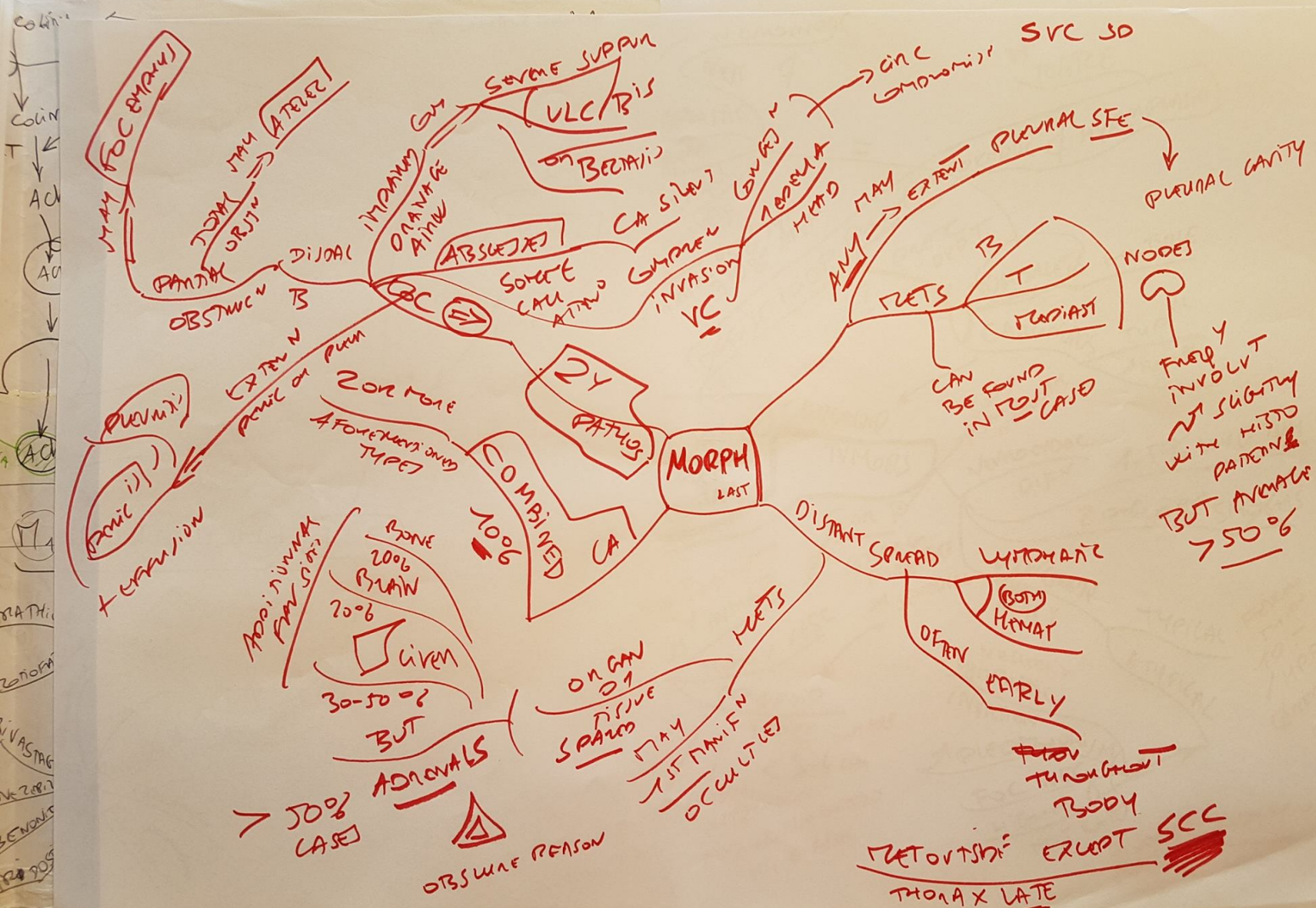


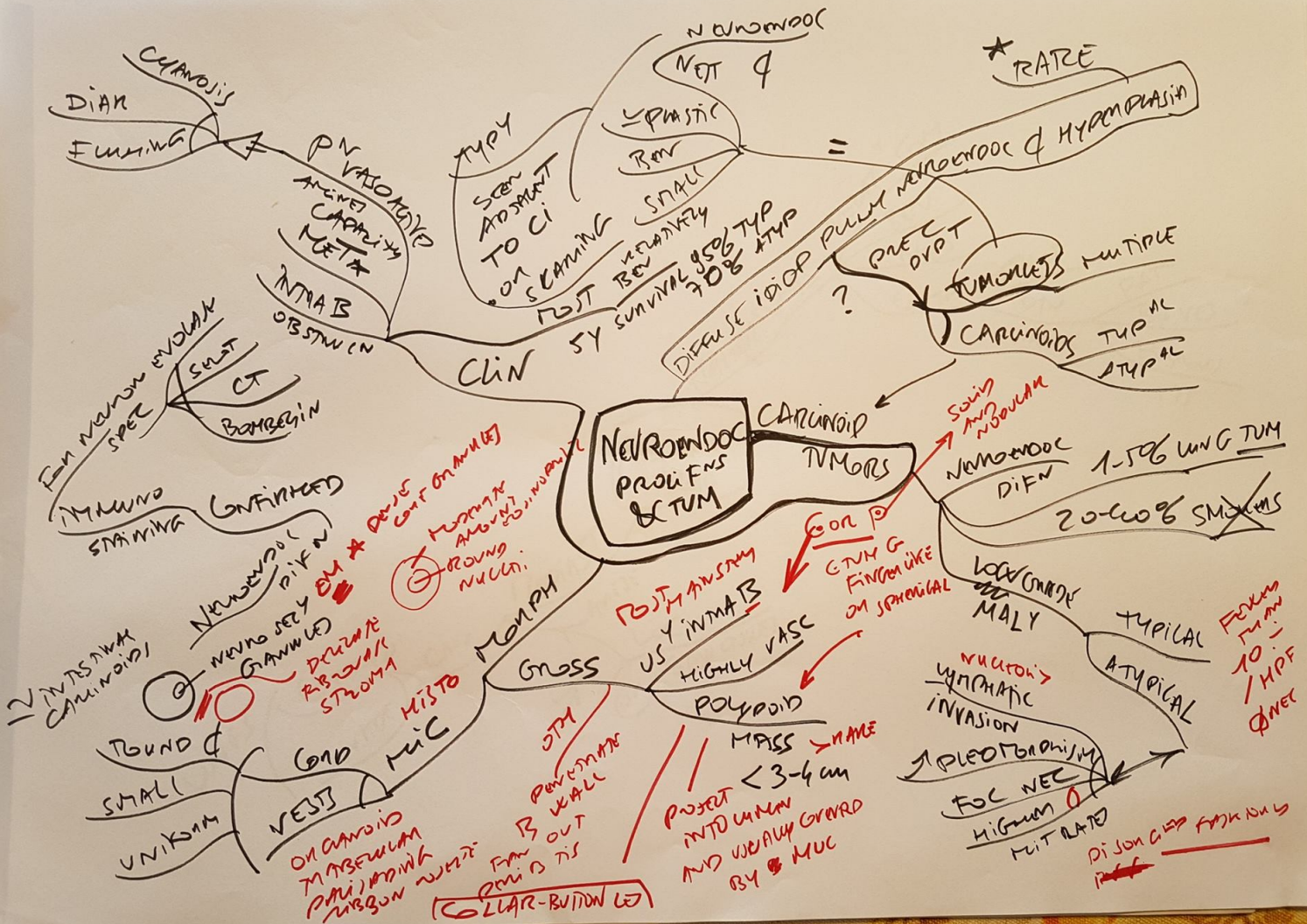


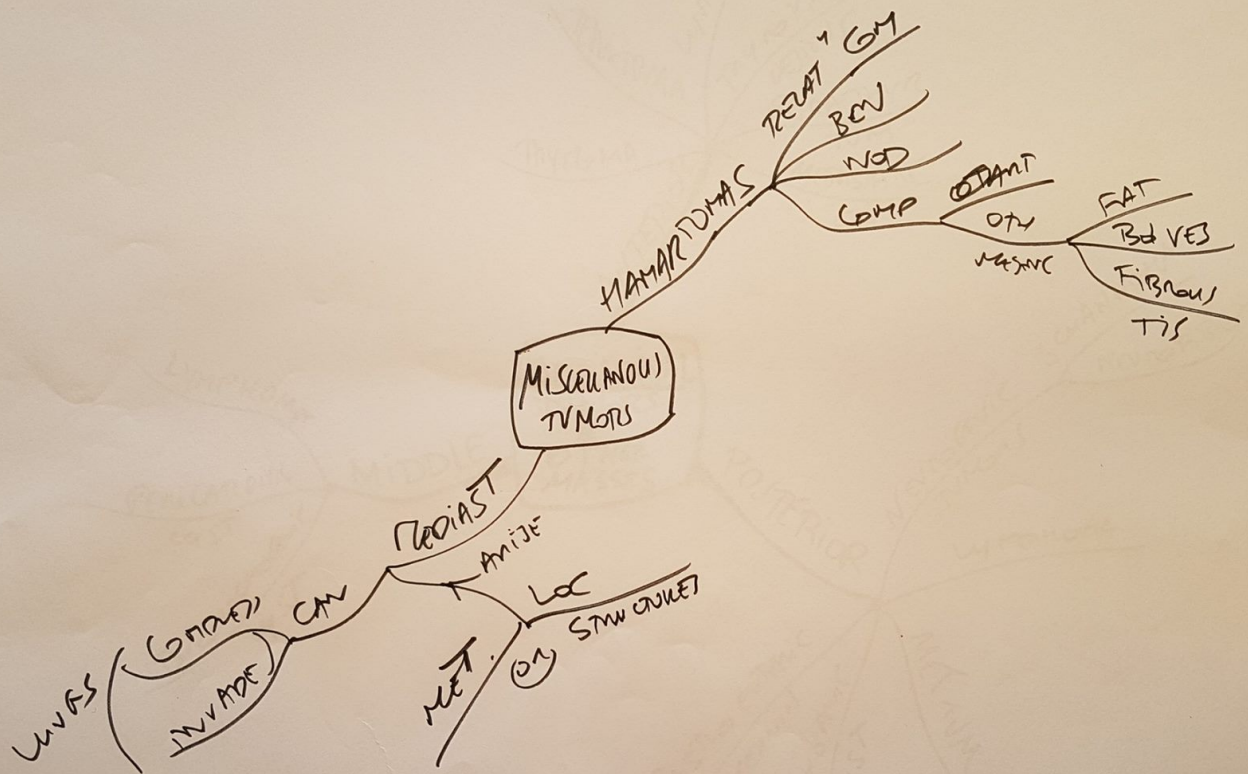


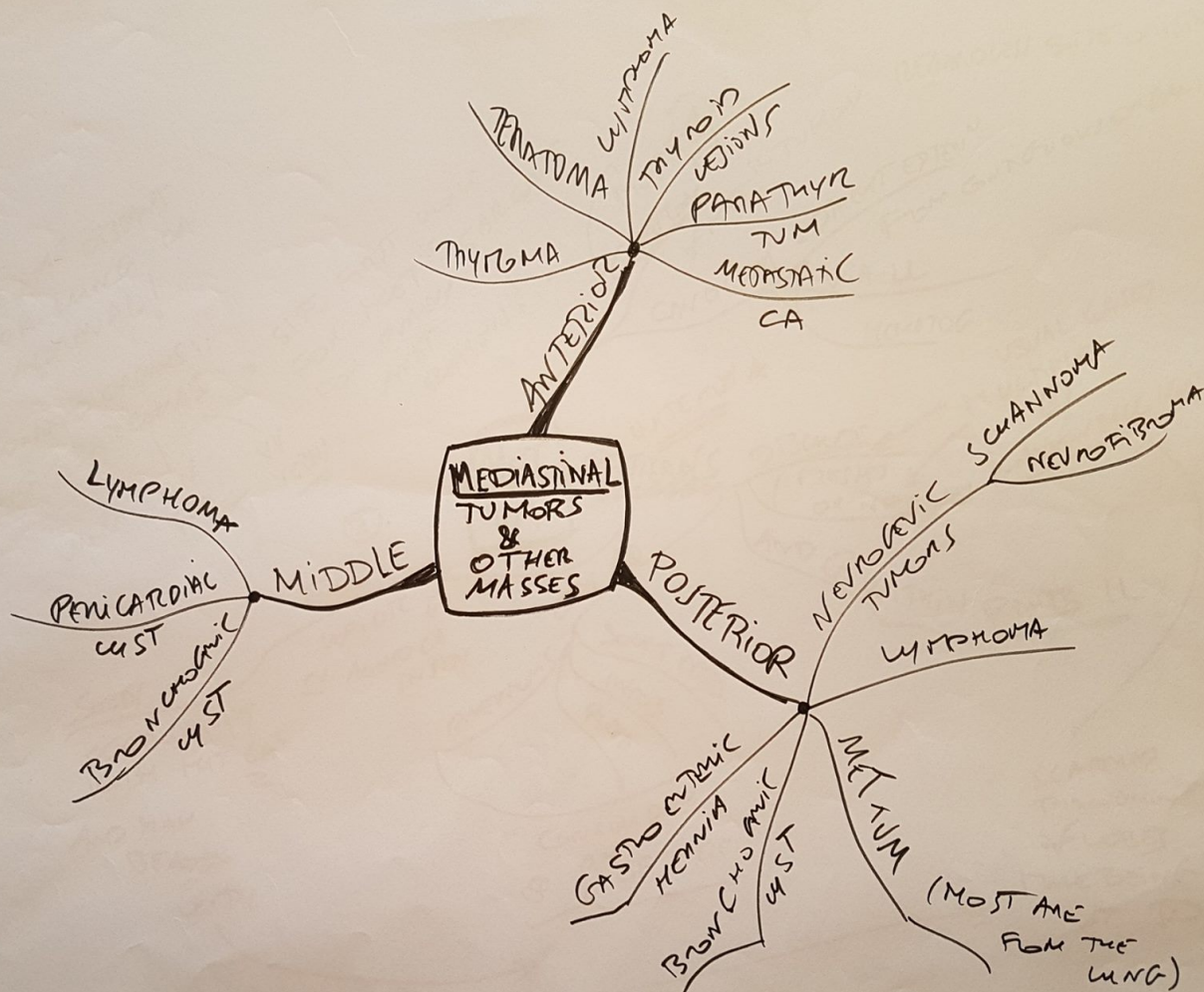












2 WRM

NB: OFTEN VERY AT DISJOINT
MET = ADRENAL!
PORTAL DRAINED ORGANS::
LUNG: SARCOMAS

SIDE FIRST UNCLE
FOR MET IC SARCOMAS
FOR PULMONARY
WHAT REASONS!

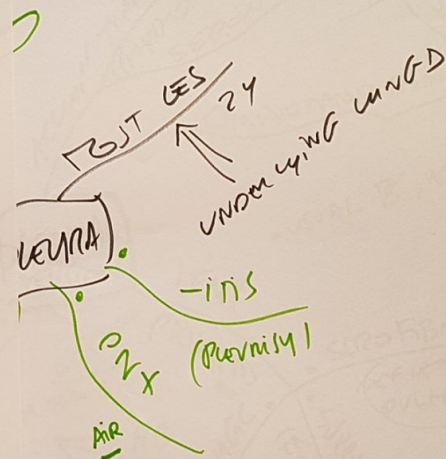
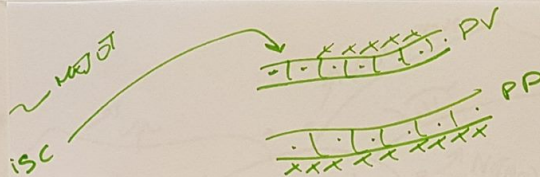
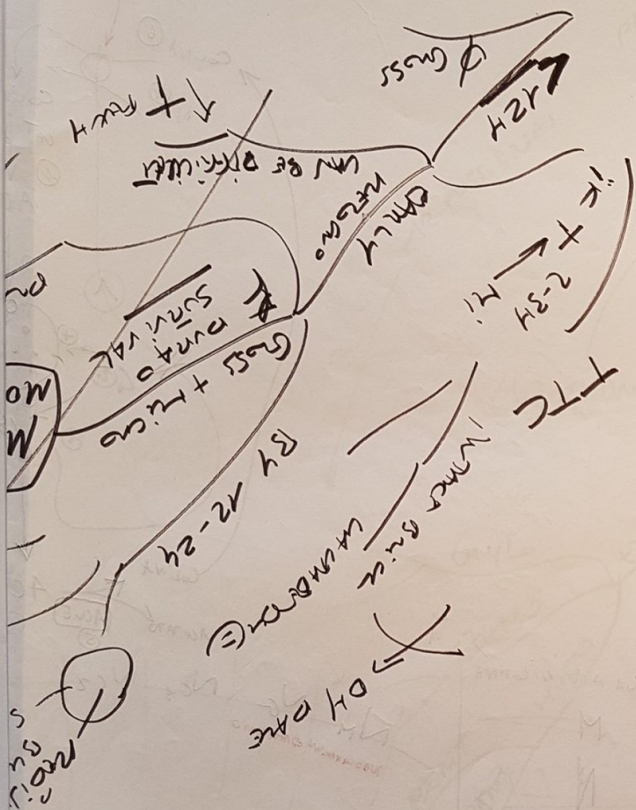
MOST COMMON
METIC TUMOR
REPRODUCED SITE ORIGIN
DIRECT EXTENSION
FROM GASTROINTESTINAL
VIA LL
HOMOLOG

MET
TUM

USUAL CASES
MULTIPLE
DISSEMINATED
FUSION
OR NODULE
AND G WITHIN PULM LL
CANNON BALL LESIONS

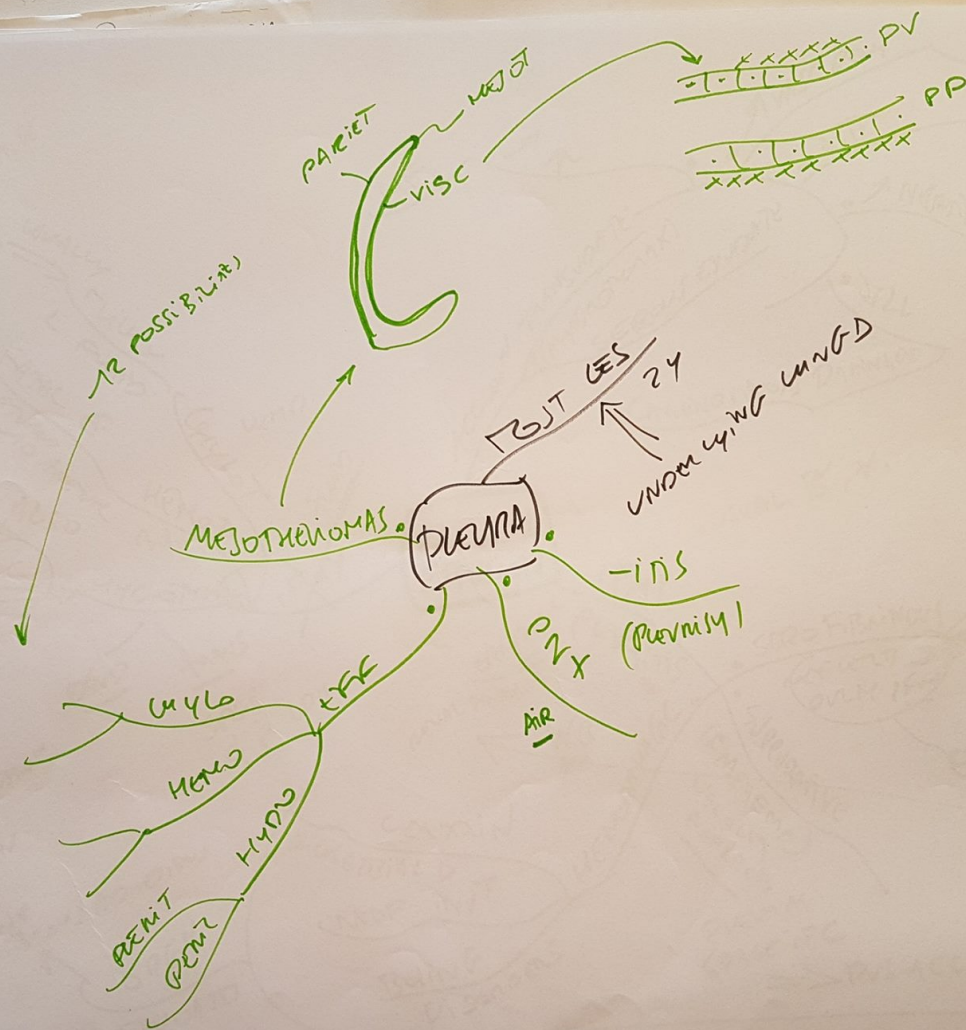
3
Foci
WIDESPREAD
ADRENAL CA
INSITU
PNEUMONIC
SOLID NOD
EMBOL
PLAIN
CONSIDERATION
OF N OF THEM
SEED
OCCASIONALLY
WITH MET CAS
AND MAY BE
WITH

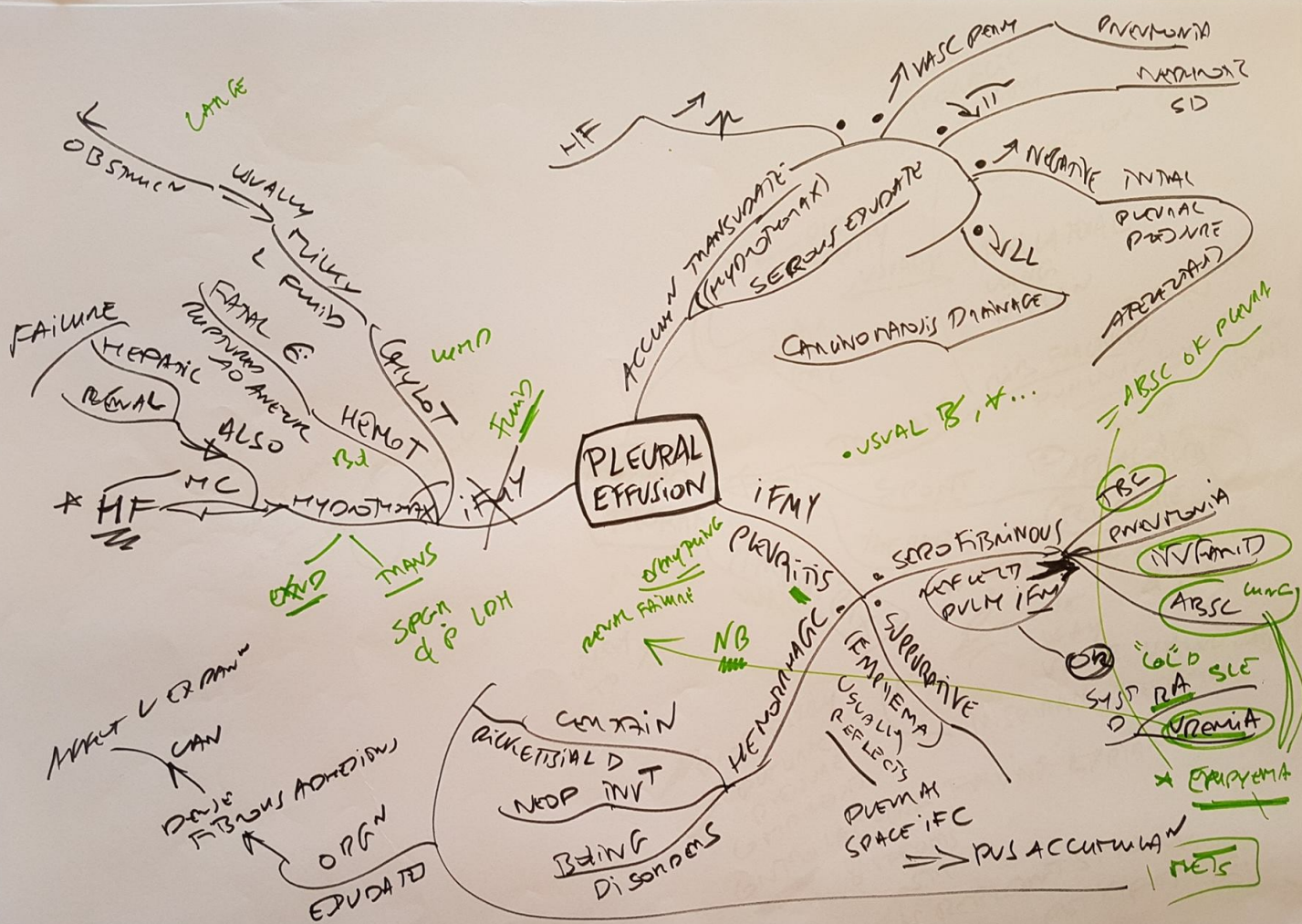
SCATTERED
THROUGHOUT
LOBES
ONE BEING
AT TD

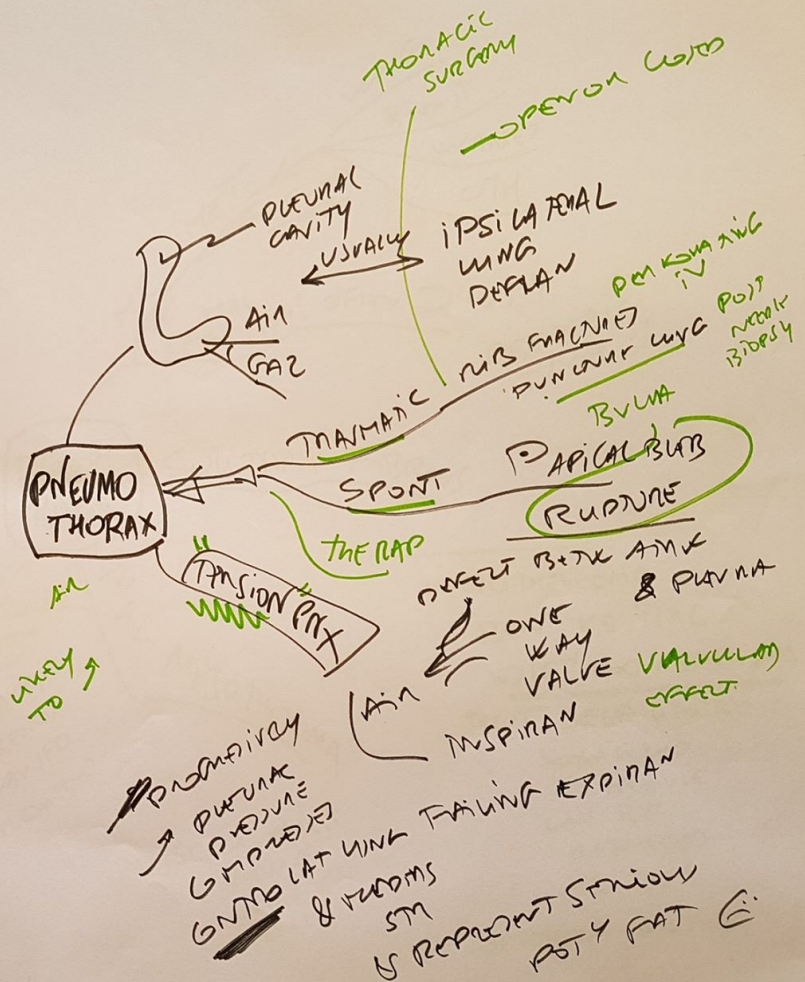


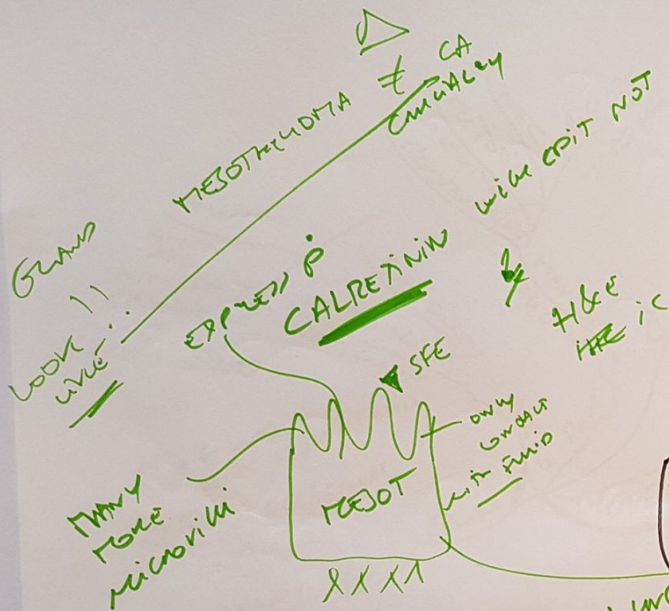
PLEURA

0.010
GABA
GAT
②
ACh
ADP
ACh
④
E

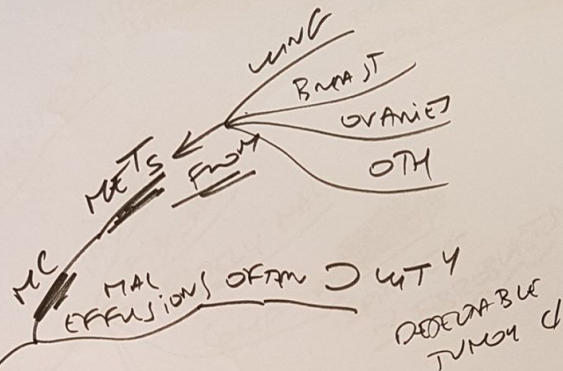








PLEURAL TUMORS



SOLITARY FIBROUS

COMPARED LUNG FROM OUTSIDE

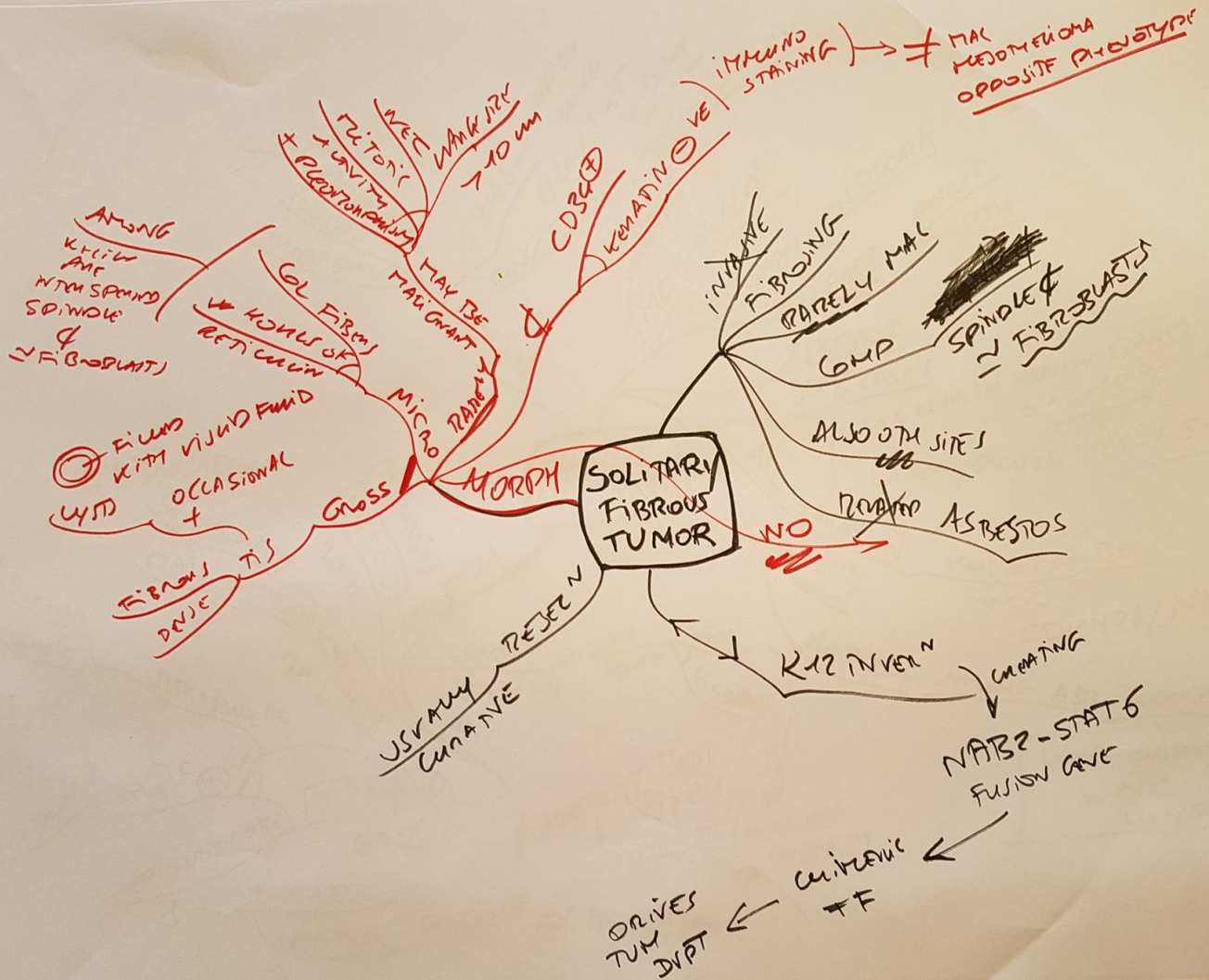
3/4 MESENCHYMA

PUSING PATERN

NOT PERMANENT AS AIRWAYS CAPSULE "PLEURALS" ON

VISCERAL PLEURAL PARIETAL

MESENCHYMA "BEN" VS "MAL" DIFW DO NOT PARITY BUT SELF LIMITED LOCALIZED NODULE CAN BE RESEMBLED AS BEN SPREADING $\rightarrow$ MAL



MALIGNANT MESOTHELIOMA

CLIN

REC PLEURAL EFFUSION
 DYSP
 CLOTTING
 + MAL → INVADE LUNG
 & CAN'T SURVIVE
 WIDELY
 LONGER THAN 2Y

UACOM
 MESOTHELIOMA
 PROTOGEN IN PLEURA

(C7) FREE
 PERIT
 OTY

ASBESTOS
 90% CASES
 [UTERINE IN HEAVY EXPOSURE
 = 10%]
 LATENCY PERIOD 25-45 Y*

MC CYTOKININ
 80%
 NOTABLY AMONG ASB WORKERS
 TSG CDKN2A/INK4a
 HOMOLOG DELETION

LUNG CARCINOMA
 = MC LUNG TUMOR

HISTO

~ FIBROSARCOMA

SPINDLE SHAPED
 MAL
 (BIPHASIC) MIT ED
 20%
 SARCOMATOID
 20%

SPREAD DIFFUSELY
 MIC
 OVER LUNG
 STE
 FISSURES

EPITHELIOID
 60%

+ MUCIN
 MUCIN
 PUMP
 EVASION SHEATH

AGIC +
 EPITHELIAL LIKE
 d → TUBULE
 PAPILL

PROTEINS ~ ADAM10, CAS

Mvilli
 SURVIVAL
 LUNG

CK5/6

WT-1
 CALNECTIN

