SUPPLEMENTAL TABLE 1:

Demographics of the development group. WB= Whole Body; HN = Head and Neck; SCID = Severe Combined Immunodeficiency; FTT= Failure to thrive; CGD = Chronic Granulomatous Disease. PTLD = Post Transplant Lymphoproliferative Disease.

Indication	Acquisition	Gender	Age (years)	Result of FDG PET
Fever	Brain	F	9	Non-specific findings HN regions. No other focus of infection
Polyalgias	Brain	F	17	Normal study
Fever	Brain	M	3	Non-specific findings HN regions. No other focus of infection
Lymphoma	HN	M	5	Burkitt lymphoma bones, kidneys, upper abdomen
Lymphoma	HN	F	12	B cell lymphoma of bone
Lymphoma	HN	F	10	T cell lymphoblastic lymphoma stage IV
Neck Pain	Brain	M	16	Normal study
Infection	Brain	M	18	Prior treated LAL. Non-specific findings HN regions.
Lymphadenopathy	HN	M	6	HN infection/inflammation
Polyalgias	Brain	F	10	Normal study
Lymphoma	HN	M	3	T cell lymphoblastic lymphoma stage IV
Neoplasm	HN	M	17	Esinophilic granuloma T11
Lymphadenopathy	HN	M	11	Cervical Rosai Dorfman
Lymphadenopathy	HN	F	8	Normal study
Lymphoma	HN	M	16	Hodgkin Lymphoma stage II
Lymphoma	HN	M	9	Cervical Burkitt
Lymphadenopathy	HN	M	6	Non-specific findings HN regions. Reactive lymph nodes
Lymphadenopathy	HN	F	4	Non-specific findings HN regions. Reactive lymph nodes. Pneumonia
Lymphadenopathy	HN	F	10	Normal study
Lymphoma	HN	F	16	Hodgkin Lymphoma stage IIB
PTLD	HN	F	14	Renal transplant. No PTLD
PTLD	HN	M	7	Cardiac transplant. No PTLD
Infection	HN	F	10	Normal study
Neoplasm	HN	M	18	Langherans cell histiocytosis
FTT	WB	F	18	Non specific findings HN regions.
Lymphadenopathy	HN	F	10	Normal study
Lymphadenopathy	HN	M	14	Non-specific findings HN regions. Reactive lymph nodes
Lymphadenopathy	HN	F	7	Non-specific findings HN regions. Reactive lymph nodes
PTLD	HN	M	17	Renal transplant. Abdominal PTLD
Fever	WB	M	2	No infection
Polyalgias	HN	F	10	Normal study
Polychondritis	HN	M	2	Normal study
Lymphoma	HN	F	14	Hodgkin Lymphoma stage IV

Hypertension	Brain	F	16	Normal study
Lymphoma	HN	M	14	Hodgkin Lymphoma stage IIA
Sarcoidosis	Brain	M	9	Non evidence of sarcoidosis
Fever	WB	M	3	Non-specific findings HN regions. Reactive lymph nodes. Pneumonia
Neoplasm	WB	F	9	Osteosarcoma
FTT	WB	F	9	Non-specific findings HN regions. Reactive lymph nodes
Neoplasm	WB	F	9	Osteosarcoma
Xerostomia	WB	M	10	Normal study
Infection	WB	M	16	Sternal osteomyelitis
Lymphnodes	WB	F	2	Benign reactional lymphoproliferation
Neoplasm	HN	F	12	Ewing sarcoma
PTLD	HN	M	6	Cardiac transplant. No PTLD
Neoplasm	WB	F	2	Neuroblastoma
Abdominal pain	WB	M	8	Mesenteric adenitis
Fever	WB	F	8	Non specific findings HN regions
Neoplasm	WB	M	12	Ewing sarcoma
Infection	WB	M	10	Cervical adenitis
Neoplasm	WB	M	4	Neuroblastoma
MGC	WB	M	0,5	Pneumonia
Lymphoma	HN	F	15	Grey zone lymphoma
Fever	HN	F	16	Normal study
Lymphoma	HN	M	11	Hodgkin Lymphoma stage IIIB off treatment
Lymphoma	HN	F	4	Burkitt lymphoma
Neoplasm	WB	F	1	Mediastinal mass. No evidence of neoplasm. Likely post infection
SCID	WB	M	1	B cell lymphoma
Lymphoma	WB	F	3	Anaplasic lymphoma

SUPPLEMENTAL TABLE 2:

Demographics of the validation group. WB= Whole Body; HN = Head and Neck; ITP: Idiopathic Thrombocytopenic Purpura; CGD = Chronic Granulomatous Disease.

Indication	Acquisition	Gender	Age (years)	Result of FDG PET
Lung inflammation	Brain	F	13	Normal study
Cutaneous anomalies	Brain	F	16	Normal study
Crohn	Brain	F	14	Duodenal ulceration
Coeliac disease	Brain	M	15	Small bowel inflammation
Neoplasm	HN	F	15	Nasopharyngeal Sarcoma
Lymphoma	HN	F	4	B cell lymphoma
Neoplasm	HN	F	13	Posterior mediastinal mass / schwanoma
PTI	WB	F	12	Non specific findings HN regions
Fever	WB	F	2	Pneumonia
Fever	WB	M	4	Non specific findings HN regions
Lymphadenopathy	HN	M	15	Benign reactional lymphoproliferation
Neoplasm	HN	F	13	Inactive mandibular mass / aneurysmal bone cyst
Lymphoma	HN	F	12	Hodkgin Lymphoma stage III A
Fever	WB	M	3	Non-specific findings HN regions. Reactive lymph nodes
Lymphoma	HN	M	11	B cell lymphoma stage I
Lymphoma	WB	F	11	Hodkgin Lymphoma stage IV-B
Lymphadenopathy	HN	M	8	Benign reactional lymphoproliferation
Fever	HN	F	18	Small bowel inflammation and lung nodules / Loeffler
Neoplasm	WB	F	14	Rhabdomyosarcoma
Polyalgias	WB	M	11	Digital soft tissue inflammation
Lymphadenopathy	WB	F	3	Normal study
CGD	WB	F	1	Pneumonia
Lymphadenopathy	HN	M	15	Benign reactional lymphoproliferation / toxoplasmosis
Neoplasm	WB	M	1	Follow sarcoma. Normal study
Polychondritis	HN	M	16	Normal study
CGD	WB	M	7	Normal study
Fever	WB	M	6	Non-specific findings HN regions. Reactive lymph nodes
Fever	WB	M	2	Non-specific findings HN regions. Reactive lymph nodes
Crohn	Brain	F	17	Non-specific findings HN regions. lymph nodes

SUPPLEMENTAL TABLE 3:

Optimal models for WBN

Quadratique = quadratic ; linéaire = linear; cubique = cubic; composé = modified power law; de puissance = power law; logarithmique = logarithm

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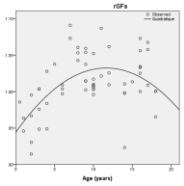	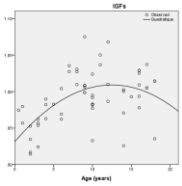
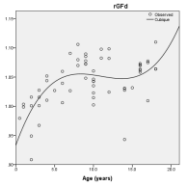	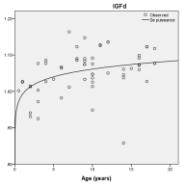

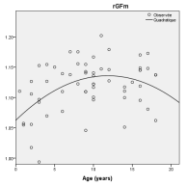	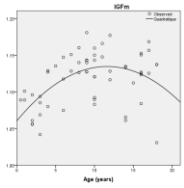
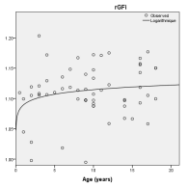	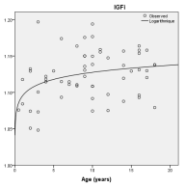
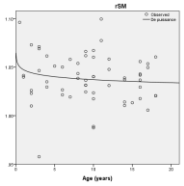	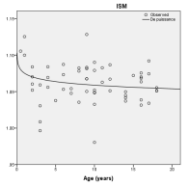
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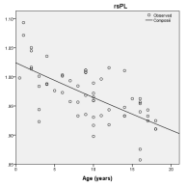
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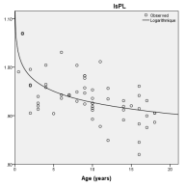
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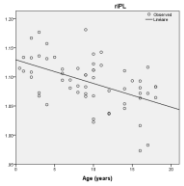
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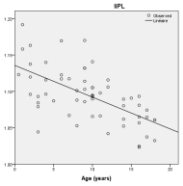
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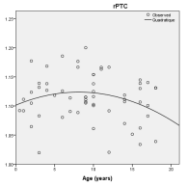
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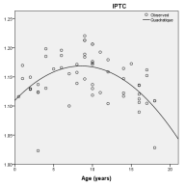
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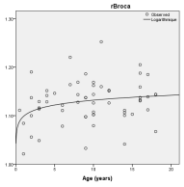

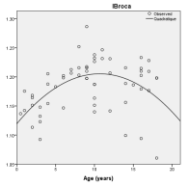

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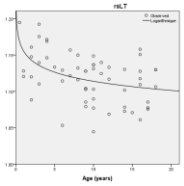

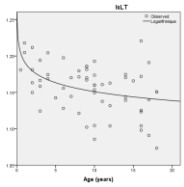

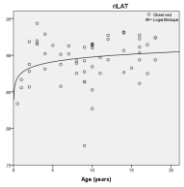

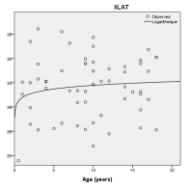

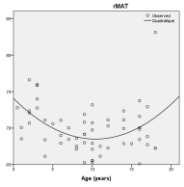
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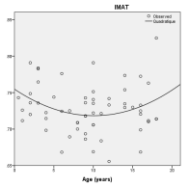
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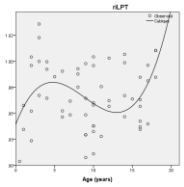
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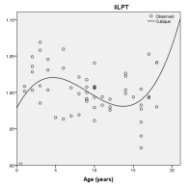
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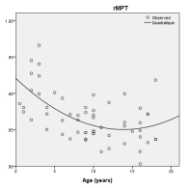
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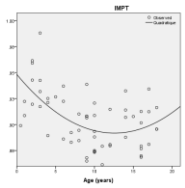
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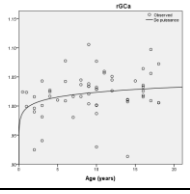

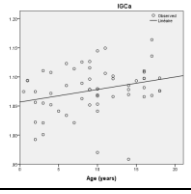

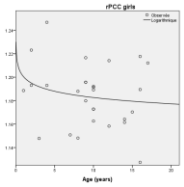

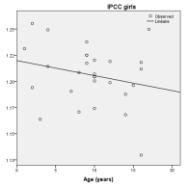

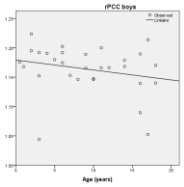

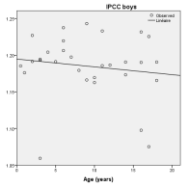

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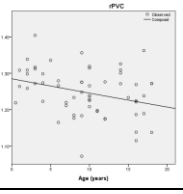
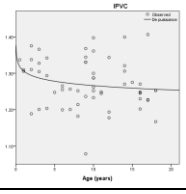
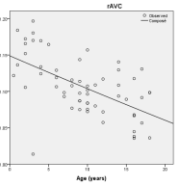
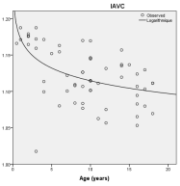


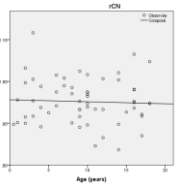






BASAL GANGLIA

WBN



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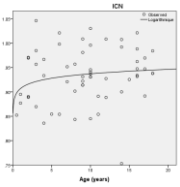

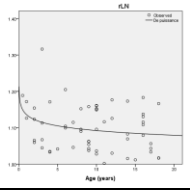

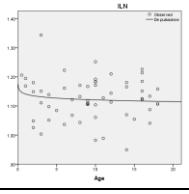

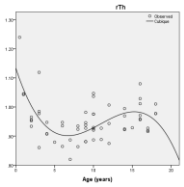

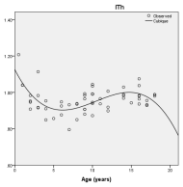

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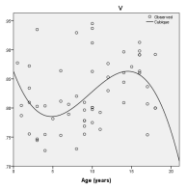
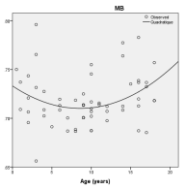
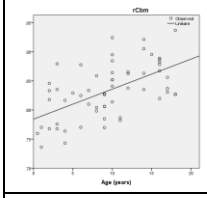
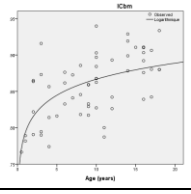
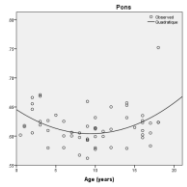





rCbm
Age (years)

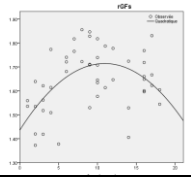
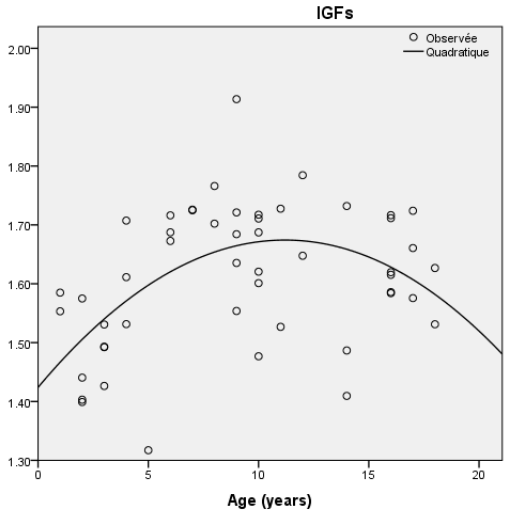
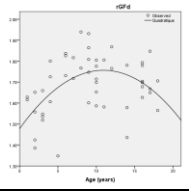
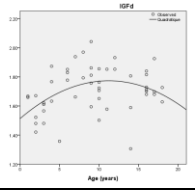

lCbm
Age (years)

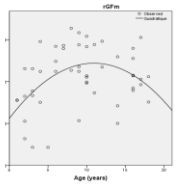

Pons
Age (years)

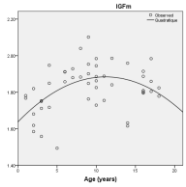
SUPPLEMENTAL TABLE 4:

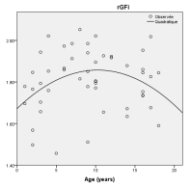
Optimal models for PN

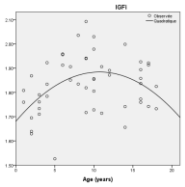
Quadratique = quadratic ; linéaire = linear; cubique = cubic; composé = modified power law; de puissance = power law; logarithmique = logarithm

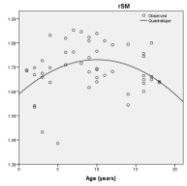
FRONTAL LOBES	
	
	

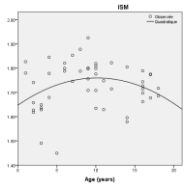




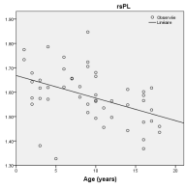


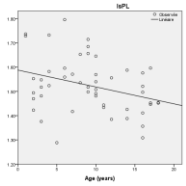


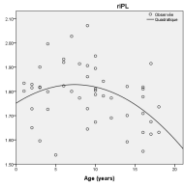


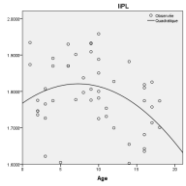


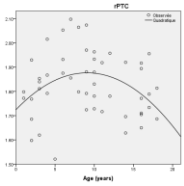
PARIETAL LOBES

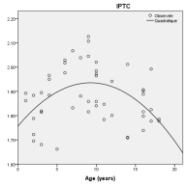

rsPL
Observée
Linéaire
Age (years)

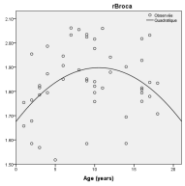

lsPL
Observée
Linéaire
Age (years)

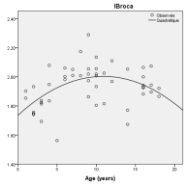

rlPL
Observée
Quadratique
Age (years)


llPL
Observée
Quadratique
Age

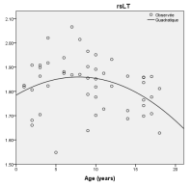

rPTC
Observée
Quadratique
Age (years)

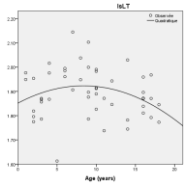

lPTC
Observée
Quadratique
Age (years)

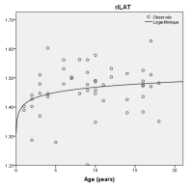


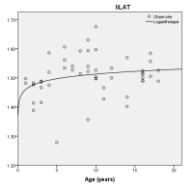


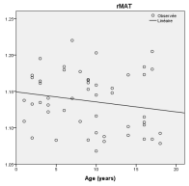
TEMPORAL LOBES

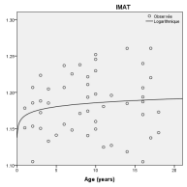


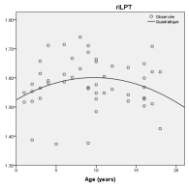


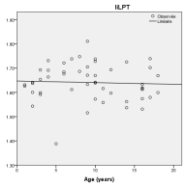


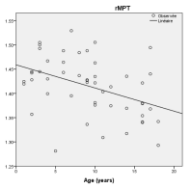


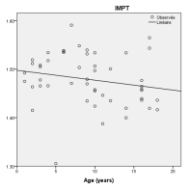

rMAT
Age (years)


lMAT
Age (years)

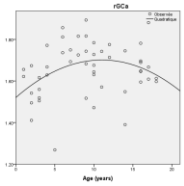
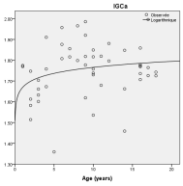
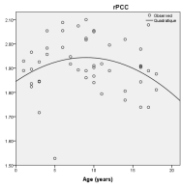
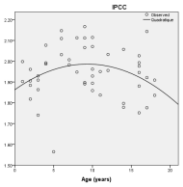
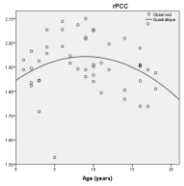
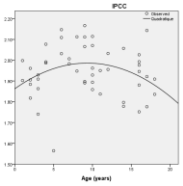

rILPT
Age (years)

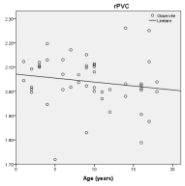

lILPT
Age (years)

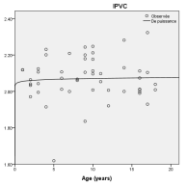

rMPT
Age (years)

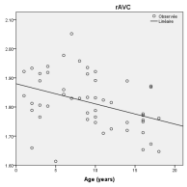

lMPT
Age (years)

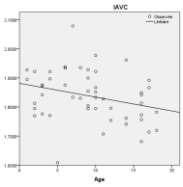
CINGULATE

	
	
	
OCCIPITAL LOBES	
PN	PN





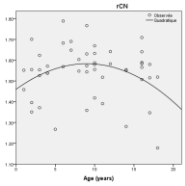


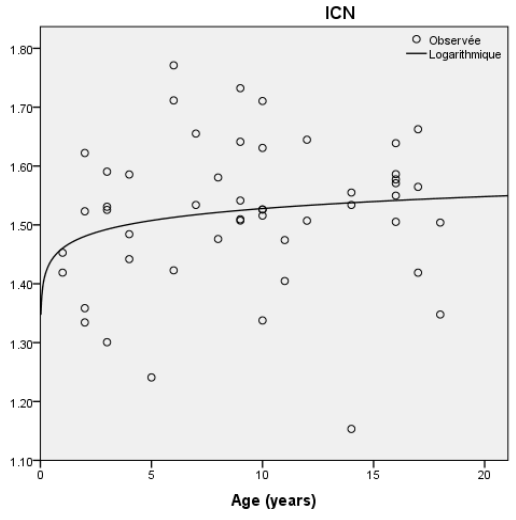


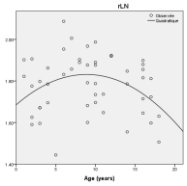
BASAL GANGLIA

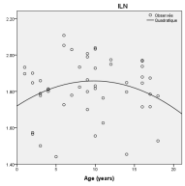
PN

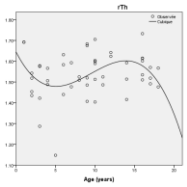
PN

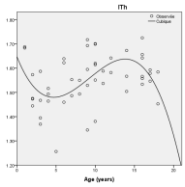




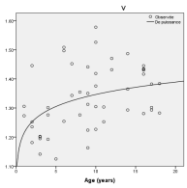


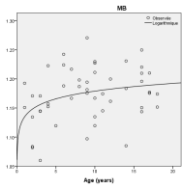


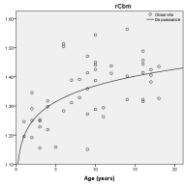


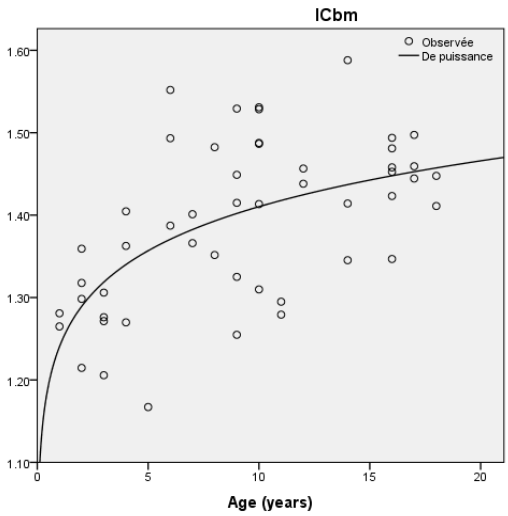


POSTERIOR FOSSA








lCbm
Observée
De puissance
1.60
1.50
1.40
1.30
1.20
1.10
0
5
10
15
20
Age (years)