

Otology-Neurotology Database



(ONDB)© a new integrated user-friendly database to manage patient's clinical, surgical and audiological information.





Available versions: Stand-alone or Client/Server - For Mac or PC - Hardware requirements: Pentium 4 / iMac minimum - 1 Gb of RAM minimum - 2 Gb recommended - Minimum Windows XP SP3 and later - Mac OS X 4.11 and later - Compatible LION.



Description and technical specifications

ONDB definition.

ONDB is an appropriate softwarein the middle of Otology, it allows you to generate a patients file and register all your surgical and audiometry performed. All the criteria for analysis of your surgery are pre-entered, just select the most suitable, you can even complete the pre-selected lists. A module "Result" will allow you to analyze some or all of your interventions with the greatest accuracy, in terms of what are the best results you get for this type of patient with this type of prosthesis, for example.

ONDB is programmed in 4D (http://www.4D.com) (http://www.4D.com)

We are 4D Partner, which means that in case of problem specific programming, we have the support of the Society 4D to solve our problem. ONDB requires QuickTime to fully exploit the characteristics of embedded images, and those that you import into the database.

QuickTime is free and you can download it from Apple website:

English http://www.apple.com.uk/quicktime/download/
French http://www.apple.com.cn/quicktime/download/
Chinese



Installation





Network version: CLIENT / SERVER:

A ONDB technician will come in handy for this installation. Do not attempt to make this installation. It requires some technical skill server, rights management and network knowledge.

<u>Single-user version:</u> after downloading the latest version of the ONDB website http://www.denis-rui.com, run the installer for Mac or PC, By default the installer will install ONDB:



"Applications" folder and a ONDB shortcut on the desktop.



"Program Files" folder and a ONDB shortcut on the desktop.

This repertory created is important because it will contain all your data, do not move this folder because ONDB during the upgrades, will always find this folder to change the old files (your actual data is always preserved).

After the installation, click to "OK". To start ONDB, double-click it. Enjoy



First Use



English





Français

nçais 👎

At the first use of ONDB, you will be asked:

- language in which you want to work (English, French)
- to choose a username and a password.



This is your first use of ONDB. Please choose your Loggin and Password

✓	×	User
		Exemple : WHITE John
	Name and First Name	
	Loggin user	
	Password	
	Please, confirm your Password	

CAUTION remember this password,

It is regarded as the Administrator password, then you will be asked for any changes in your patient file to modify file (it is a measure of security and protection of your data in case of shared data, only you can modify your own patient file, giving the administrator password and the reason for the proposed amendment).

You will then have the possibility to add users, but they will not have access to changes in forms, unless you provide them the Administrator password.



Validate



Cancel



Control panel of ONDB





This tool will allow you to switch between all the open windows.



The list of patients directly accessible from the icon.



Enter a new patient file.



Find a patient according to several criteria



Pop-up list, all diseases are classified with their respective criteria.



Results and statistics of your surgery.



Results of the consultations



Access to the list of files modified



User Preferences



Preferences ONDB



Document template

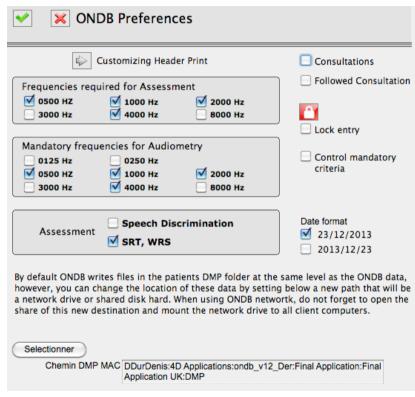


About ONDB





ONDB Preferences



Customize the header print, clicking above, you can paste your hospital logo and address to customize printing sheets.

Also select the frequency you want to capture and analyze for the statistics.

By selecting the box "Consultation", box will display management consultations in the patient file. Lock input: once in data entry completed and validated, it can not be modified by entering the administrator password and specifying the reason for the change.

Mandatory criteria: to have reliable statistics it is necessary to meet the same criteria to all patient records, but sometimes forcing you whether or not to enable this feature.

ONDB writing or copy all external documents in a directory called DMP, on the same level as the program. You can define another directory on your computer or on the network.





List of Patients













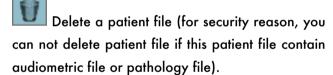
Switch between all your open windows.



Validate and close the list of Patients.



Add a new patient file.





View all selection.



View a Subselect.



Publisher Research.



Set sort on the current selection.



To state semi-automatic.



To define and print labels.



Print a selection.



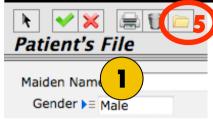
Make graphs to the current selection

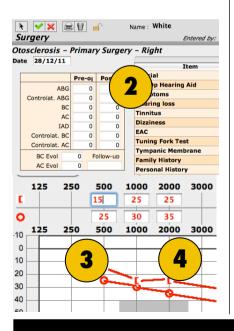
By default, the list of patients is sorted by name and surname of the patients. Each selection you have on the screen tells you the numbers of men, women and total selection.

A double click on the line will bring up a patient's detailed specs. The window of the list of patients is a floating window, you can move on your screen.



Procedure for Entering data





It is very important to follow the entry procedure described below in order to generate accurate statistics.

- 1) ENTERING THE DATA PATIENT
- 2) ENTERING THE FILE OF PATHOLOGY
- 3) ENTERING THE PRE-OPERATIVE AUDIOGRAM
- 4) ENTERING THE POST-OPERATIVE AUDIOGRAM (if necessary)
- 5) EXTERNAL MANAGMENT DOCUMENTS (videos, photos, documents ...)

If you perform surgery on a patient, you must enter the Administrative Data and enter the details and then enter the Pathology file and then the audiometric Pre-operative file who is affected ...

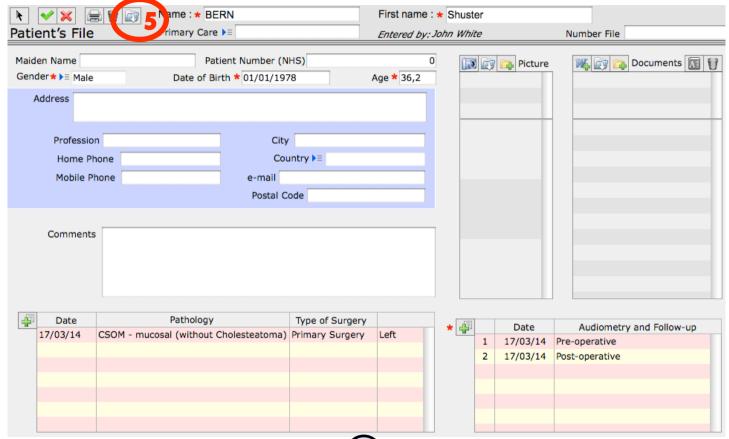
After the surgery file, you can enter another sheet audiometric postoperatively.

If the patient comes to see you in 1 month or 1 year 6 months, you can enter values Postoperative Audiometric to this new date. Statistical calculations will default on the last post-operative, however, you may request a reduction of less than one week, for example to have the current statistics with the results immediately after surgery.





Patient File (1/2)







Patient File (2/2)

Name: White

Gender ▶≡ Male

Date of Birth 10/12/89

You must enter the patient's administrative data, some criteria are necessary because of the statistics required for the calculations:

The name, gender (male or female), date of birth.

The format for entering date of birth is the language of your computer and then your country.

Example:

- French Format: DD / MM / YYYY - English Format: YYYY / MM / DD

The patient file lists:

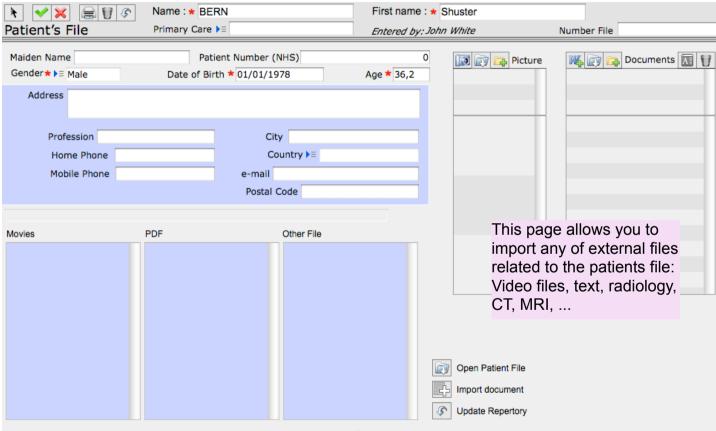
- Diseases (surgical patient)
- The pictures used for the Patient,
- The documents of the Patient File
- The audiometric tests

You must select a pathology in the list to see the audiometric tests that are affected. This is very useful in the case of multiple surgeries. Similarly, to create an audiometric testing, you must select the surgical procedure to which it relates.



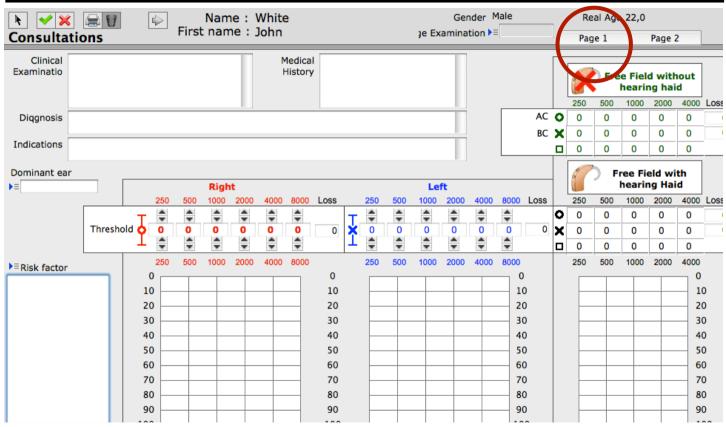
Allows you to add a record (Intervention, Photo, Document, or audiometry)





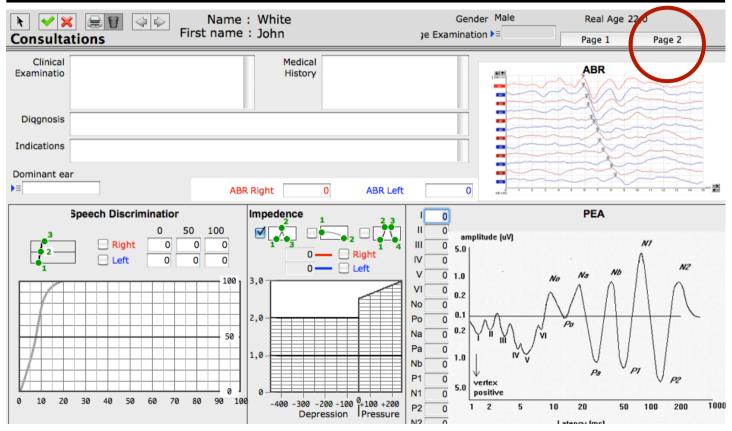


Consultation File (1/2)





Consultation File (2/2)





Consultation File - details

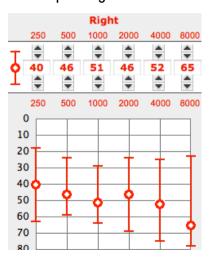
Page 1

Enter:

- The ear dominant important if you want reliable statistics in this area.

The clinical data, medical history, diagnosis and medical indications.

Fields free ear or not paired with a click on the corresponding values



The threshold with a click on the corresponding curves, you then adjust with the cursor up and down the minimum and maximum values of hearing.threshold.

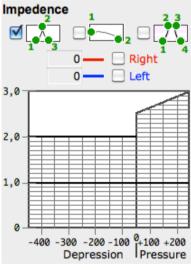
Page 2

Enter:

The Voice: click on the curve in the order specified points on the graph miniature green.

The impédencemétrie: First select the graphic you want, then click in the order of green points shown on the corresponding graph. (first click on the desired side).

The other curves can be 1,0 stored directly by the input values (ABR and PEA).

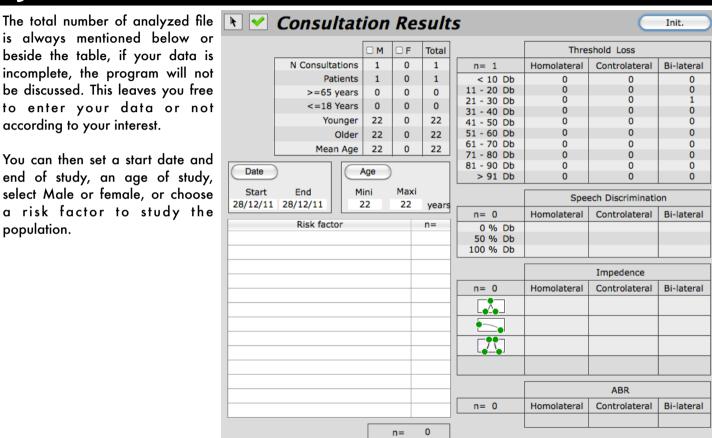




Consultations results

is always mentioned below or beside the table, if your data is incomplete, the program will not be discussed. This leaves you free to enter your data or not according to your interest.

You can then set a start date and end of study, an age of study, select Male or female, or choose a risk factor to study the population.





Pathology File (1/3)

▶ ✓ × ■ 0	Name :	ALCARAZ	Entered by: Denis Alcaraz	
Surgery	First name :	Denis	Gender Male	Date of Birth 05/07/1981

Otosclerosis - Primary Surgery - Left

Date 29/01/2013

	Pre-o	Post-o		
ABG	8,75	20		
Controlat. ABG	17,5	21,25		
BC	13,75	27,5		
AC	22,5	47,5		
IAD	-15	-6,25		
Controlat. BC	20	32,5		
Controlat. AC	37,5	53,75		
BC Evol -13	3,75 F	ollow-up		
AC Evol	-25	.8		

z-clinical v					
Item			Terms		
Special	ر ا	ĸ	Only One Ear		
Pre-Op Hearing Aid	ر	ĸ	Operated Ear: Efficient, Bilateral, Operated Ear: Poorly Efficient		
Symptoms	ر	ĸ			
Hearing loss	ر	ĸ	Unilateral Mixed HL		
Tinnitus	ر	ĸ	Low Frequency, High Frequency		
Dizziness	ر	ĸ	Tullio Phenomenon +ve		
EAC			Narrow, Narrow		
Tuning Fork Test	ر	ĸ			
Tympanic Membrane	ر	ĸ	TM Retraction		
Family History					
Personal History		r			

2-Clinical

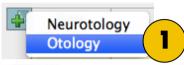
•

Date 29/01/2013 AC Speech Dis BC Post-operative Date 2000 3000 4000 8000 Mean 1000 2000 3000 4000 8000 Mean 50% 100% Right 02/01/13 26,25 25/02/13 32,5 Left 02/01/13 25/02/13 Operated ears



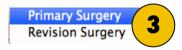
Pathology File (2/3)





Otosclerosis

Osteogenesis Imperfecta
Congenital Malformation of the Ossicles
CSOM – mucosal {without Cholesteatoma}
CSOM – squamous {with Cholesteatoma}
Implantable Hearing Aid





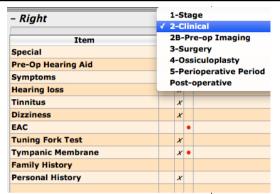
Bottom left of the patient file, click the green cross (4) to add a Pathology. You will select from a list pop-up four different criteria:

- 1) Otology and Neurotologie (Choose surgical specialty),
- 2) The surgery performed,
- 3) The type of intervention, 2 or 3 choice according to the chosen surgery: Primary or Second Time,
 - 4) The side affected by the surgery.

In case of non-selection of one of these criteria, the creation of the pathology file will be canceled.



Pathology File (3/3)



The surgery file opens pre-filled with data from 1_Stage (First intervention or recovery).

You will then need to complete each item required for each tab presented on your screen with a red dot (eg tab on the left to EAC).

The column "red points" is the mandatory criteria. It is very important to fill them because they are necessary for statistical calculations.

The column "x" has multiple criteria, meaning that you can enter multiple values in the same item.

EAC

Normal

Narrow

Exostosis
__Other__

Narrow

Simple Choice

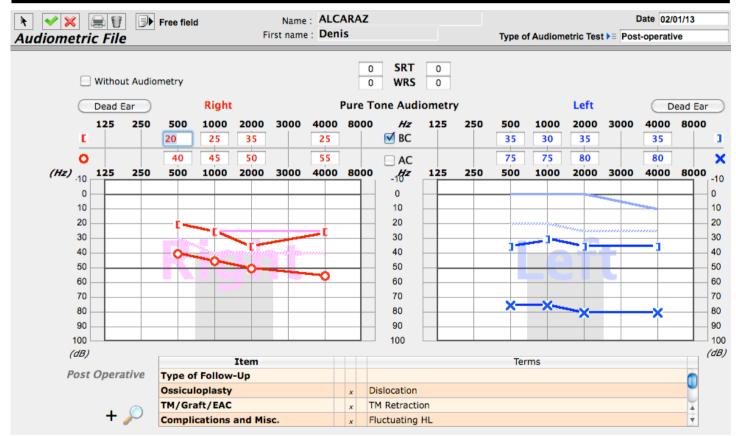
Validate

The first column shows an "R" for Recovery criteria for intervention or an "S" for Second Stage. It is given to you for information purposes only and is not therefore just to tell you what are the criteria used for statistical calculations and Recovery and Second Stage.

To enter: Take a click on the column off right in front of the item to be completed (eg left: EAC). A combo box appears on your screen, you can choose the test that best fits your case or enter a new («___ Other___ "). If you type a new test, it will be stored and will appear in your next input.



Audiometric File

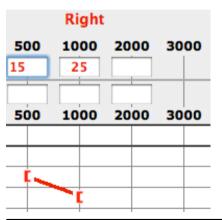




Pre-Audiometric File



Date	28/12/2011		Today
		Cancel	Validate



After entering all the criteria of your pathology file, you can validate.

Now it is your responsibility to create an audiometric test "preoperative." Since the patient file, you select the action that you want to create an audiometric test, and then click the green cross to the left of the column "audiometry".

By default a window appears with the current date, date that you can modify to your liking.

However, note that the date of audiometric testing "preoperative" must always be less than or equal to the date of the surgery.

To enter audiometric values you have a choice of two methods:

- 1) you enter values in the corresponding boxes
- 2) Clicking directly on the chart on the desired coordinates of the point.

Once all the seizures, you can validate the audio file.



Post-Audiometric File

Repeat this process to create the audio post-operatively.

- 1) Select the surgery that you want to create an audio post-op test,
- 2) Click on the green cross of the audio window
- 3) Enter the date of the examination (date than the date of the pre-op)
- 4) Enter audiometric the values

Item			
Type of Follow-Up			
Ossiculoplasty	x	•	
TM/Graft/EAC	x	•	
Complications and Misc.	x	•	

This form is identical to the preoperative file has more in the lower part of the criteria on the same principle that the form of intervention.

They concern the criteria observed postoperatively.

These criteria will also be visible in the form of intervention to the tab "post surgery".

You can enter multiple postoperative audiometric data sheets spread over time. Only the latest will be reflected in the results, unless you ask a suitable decline another of your audio files.

If you follow the foreclosure process, you will:

- a patient file
- a surgery file
- 1 pre-operative audiometric file
- 1 or more postoperative audiometric file

For the results of your surgery, the last audiometric file be taken into account .. However, you may request a reduction (eg 1 day) to get the results immediately after surgery.

In case you do not revisit the patient in consultation, you will not achieve its audio post-operative examination, however it will still be counted in the statistical calculations, without post-operative analysis.

Some criteria are very important for people to define your study, you must enter them to get reliable statistics:

Gender (Male / Female) and date of birth in the administrative file.

All the mandatory requirements in the audio files and intervention postoperatively. These criteria can be manager by the procedure defined in the following page with the tool: "List of pop-up"



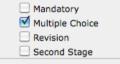
Pop Up List



п					,	
н	8			,	•	
н		٠,	V			

Pop-Up List

Otology: CSOM - mucosal (without Cholesteatoma): 2-Clinical: Symptoms





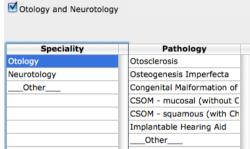
Speciality	Pathology	Domain	★ Item	Terms
Otology	Otosclerosis	1-Stage	Family History	Deafness
Neurotology	Osteogenesis Imperfecta	2-Clinical	Personal History	Tinnitus
Other	Congenital Malformation of	2B-Pre-op Imaging	Special	Dizziness
	CSOM - mucosal (without C	3-Surgery	Pre-Op Hearing Aid	Intermittent Otorrhoea
	CSOM - squamous (with Ch	4-Ossiculoplasty	Symptoms	Persistent Otorrhoea
	Implantable Hearing Aid	5-Perioperative Period	Otoscopy	Fistula Sign +ve
	Other	Post-operative	TM Perforation: Type	Fluctuating HL
		Other	TM Perforation: Aetiology	Tullio Phenomenon +ve
			TM Retraction Grade (Chara	Otalgia
			TM Retraction Grade (Sade)	Other
			TM Retraction Grade (Tos)	
			Tuning Fork Test	
			Associated Pathologies	
			Revision: N of Previous Ope	
			Revision: Timing of Failure	
			Personal Revision Chronolog	X .
			Pers. History since Previous	¥





On the tool palette to the Home screen, click the icon: Pop-up list.

A series of five columns appears when you select a row in a column, it takes place in the column immediately to its right the list of values related to it.



Example:

Click "Otology" in the first column, it will run right, the list of interventions practiced in Otology ("Surgery").

If you click on one of the interventions will take place on the right list of the main areas of analysis of that intervention (1-Stage, 2-Clinic).

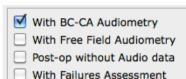
Select one of the stadium and will run the list of topics in the field, then select one item and get a list of values associated with this item.

Functions of the various columns:

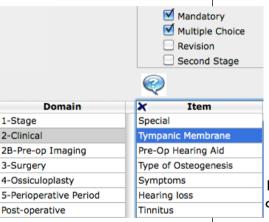
Specialty: Here you define if you want to enter other medical specialties (Ophthalmology, ENT,). If you check the option "Otology and Neurotologie", you will audiogram in the postoperative follow-up, otherwise it will be a simplified form. To enter a new specialty, double click on the line "__Autre___", enter a value and click "OK".







Surgical treatment: The list of surgical procedures that you practice. To enter a new intervention, double click on the line "___Autre____." When you select a line of action, you will see check boxes representing the characteristics of the selected intervention: the different types of audiogram and the calculation of failure, you will also appear in the right column of the Fields' s be related.

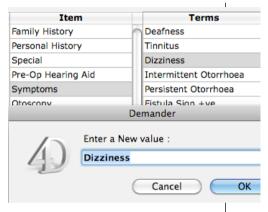


Fields: two fields are mandatory and necessary for all statistical calculations, do not delete any: 1-Step, Post-operative. These two areas are created automatically if you add a new intervention. The fields correspond to the tabs you've previously seen in the response sheets. Clicking on one of the areas, you will see on the right list of related topics. You can add or remove a domain. At the end of this chapter will explain how to delete a value in any column.

Each topic you select is assigned values in the right column, and a series checkboxes on top.

It's up to you to define what is the nature of these headings: mandatory or optional, multiple values can be entered or only one, as if this section for further surgery or a second time.





States: the list of labels related to the selected topic. these values are at the end of the chain and will be included in statistical calculations.

Modify or delete a VALUE:

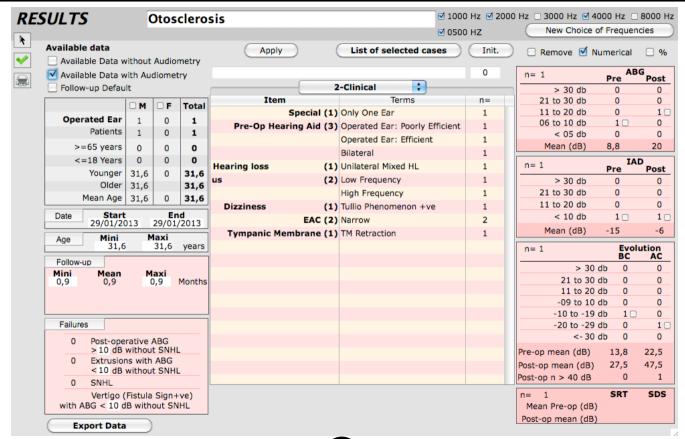
In any column: Double-click the line you want to change or delete, then: Enter a new value and click OK to change Delete the contents by pressing the delete button and click OK to permanently delete this value.

IMPORTANT: Never delete

Domain: Stage 1-and post-operative

Remember to define the character of your Headings: mandatory or optional, multiple choice or not.





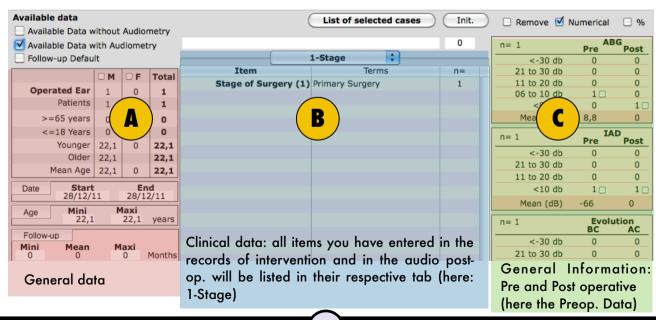




Select:

- 1) Entire database or pathology
- 2) If you choose "By pathology", you are required then the appropriate medical specialty,
- 3) Response you want to scan and ...

wait a few moments to do the calculations. These calculations are longer or shorter depending on the number of surgical procedures to treat. The screen that appears can be divided into three zones:





Results

	□м	□F	Total
Operated Ear	1	0	1
Patients	1	0	1
>=65 years	0	0	0
<=18 Years	0	0	0
Younger	22,1	0	22,1
Older	22,1		22,1
Mean Age	22,1	0	22,1

Date	Start 28/12/11	En 28/1	
Age	Mini 22,1	Maxi 22,1	years

1-Stage

- 2-Clinical
- 2B-Pre-op Imaging
- 3-Surgery
- 4-Ossiculoplasty
- 5-Perioperative Period Post-operative

n= 1	Pre AB	G Post
<-30 db	0	0
21 to 30 db	0	0
11 to 20 db	0	0
06 to 10 db	1 🗆	0
<05 db	0	1 🗆
Mean (dB)	8,8	0

Area A: All information of patients by age, gender, date of intervention. You can always make a selective search by:

Gender (Male or Female)

Date of Intervention

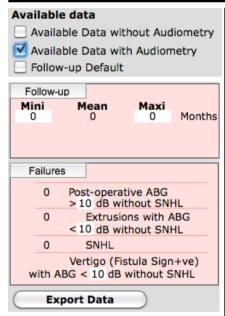
Age (12/16 years per instance if seen want to study the results of your interventions in adolescents)

Area B: All values entered in pop-up sheets are tabulated by intervention. Pull down the tab "one-stage" to choose another area and see all the values you previously entered. A double click on one of the statistics section will adjust this value

Area C: The audiometric testing pre-and postoperative values are grouped, you will be very easy for example to study the population of patients with preoperative Rinne between 21 and 30 db by selecting the check box

At any time the selective search is permitted only after you have a text entry field or checkbox.





If you select the checkbox "With Audio post-op", you will select all of the interventions that will have a postoperative audiometric testing, so the basis of the most reliable results.

In this case appear in the Area A 2 other tables concerning the selection of postoperative follow-up and accounting for your failures.

At the bottom of these tables is a button: Export data, this feature allows you to export your data in XLS format (Microsoft Excel).

The "Track" allows you to select the distance that you want to analyze for example, from 0 to + Little + 7 Months at Large for analyzing audiometric data sheets included in this period.

Also you can analyze "cases not reviewed", ie patients who you could not make audiometric testing postoperatively. These data will, however abstracts.



Results

n= 1	ABG Pre Post		
> 30 db	0	0	
21 to 30 db	0	0	
11 to 20 db	0	1 🗆	
06 to 10 db	1 🗆	0	
< 05 db	0	0	
Mean (dB)	8,8	20	

n= 1	IAD	
11- 1	Pre	Post
> 30 db	0	0
21 to 30 db	0	0
11 to 20 db	0	0
< 10 db	1 🖂	1 🗆
Mean (dB)	-15	-6

n= 1	Evolu BC	ation AC
> 30 db	0	0
21 to 30 db	0	0
11 to 20 db	0	0
-09 to 10 db	0	0
-10 to -19 db	1 🗆	0
-20 to -29 db	0	1 🗆
<- 30 db	0	0
Pre-op mean (dB)	13,8	22,5
Post-op mean (dB)	27,5	47,5
Post-op n > 40 dB	0	1
n= 1	SRT	SDS

Mean Pre-op (dB) Post-op mean (dB) In case you checked the box "With Audio Post-op," you'll just appear in the C Area another column that shows the changes pre-and postoperative CO and CA, these values are very important to judge the quality of your interventions. You can look at each individual value that has a checkbox next to him. The last column presents the average voice analysis at 50 and 100%.

▼ 0.5 ▼ 1 kHz ▼ 2 kHz □ 3 kHz ▼ 4 kHz □ 8 kHz

The top right of your screen, us can individually examine each frequency by selecting the corresponding check box and clicking

New Choice of Frequencies

At any time you can also apply the results in digital format and then a percentage:

The list of patients affected by the results you can be reached by clicking:

List of selected cases

The button will deliver to the original position of all parameters.

Initia...



ONDB - Scientific committee - Authors

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Jacob Sade (Israel)





ONDB - International Committee - Authors



<u>Author - Conceptor</u>

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Medical Project Manager Jean Causse Ear Clinic , Traverse de Béziers , Béziers, France

INPG Engineer - Project Manager Graduate of the National Institute of Polytechnic of Grenoble (38 - France)

References:

- Creator of the first Anatomical Interactive Atlas: Atlas SANDOZ
- Creator of OTOROM 2, self-formation of ENT surgeons
- Creator of ADV (Dynamic Anatomy Life) self-training medical professionals and para-medical.
- Creator manager of ONDB (Neuro-Otology Otology Database) database of prospective analysis of outcomes in Otology surgery.
- Creator manager of MSDB (Medical Surgical Database) Complete management of a hospital. Making appointments, consultations, surgery, hospitalization Anesthesia, Otology, Orthopaedics, Ophthalmology, ENT, Oncology, Emergency, edit all health mail ...

Official Developer of 4D Team France



ONDB - International Committee - Authors



Scientific Supervisor

http://www.clinique-causse.com/pages_FR/otologie/medecins/vincent.html

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- American Academy of Otorhinolaryngology Head and Neck Surgery (AAO-HNS)
- Otosclerosis Study Group
- Ménière's Society
- Indian Society of Otology and Neurotology (ISOCON)
- Live International Otolaryngology Network (LION)
- Société Française d'ORL et de Chirurgie Cervico-Faciale

AWARDS:

- Former intern Hospitals
- Honorary Fellow of the Royal College of Surgeon of Edinburgh



ONDB - International Committee - Authors



Which was created ONDB

http://www.clinique-causse.com/

The clinic in Beziers Causse Clinic in France is renowned worldwide in the field of Otology, she practiced for many years of surgical procedures which makes it a world leader in research of the ear.

ONDB was created from a study by Dr. Robert Vincent of 4,000 surgical patients with 10 years of practice.

Writing ONDB required two years of collaboration between its creator **Denis Alcaraz** and the Scientific Supervisor, **Robert Vincent** MD.

ONDB is written to SQL language ONDB allows multi-exchange systems ONDB is evolving and allows each surgeon to adapt its own technology studies

ONDB is installed to: Sao Paulo (Brazil), New York (United States), Marseille, Lyon, Marseille, Béziers (France), Hannover (Germany), Utrecht (Netherlands), England, South Africa, Spain, Italy ...



ONDB in the word

