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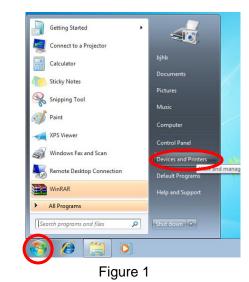
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V3.2.4

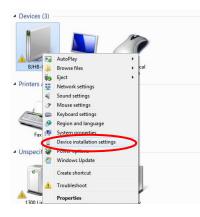
Chapter 1 SOFTWARE INSTALLATION

Start CD disc from CD-ROM

1) click on " $\overline{$ "Devices and printers"



2) Right click on "Devices", choose "Device installation settings..."





3) Choose "Never install driver software from windows update", click "save changes"

Device Installation Settings			
Do you want Windows to download driver software and realistic icons for your devices?			
Yes, do this automatically (recommended)			
No, let me choose what to do			
Always install the best driver software from Windows Update.			
Install driver software from Windows Update if it is not found on my computer			
Never install driver software from Windows Update			
Replace generic device icons with enhanced icons			
Why should I have Windows do this automatically?			
Save Changes Cancel			

Figure 3

4) Insert "SOFTWARE" U disk, automatically pop-up installation interface (if not, you can also find CD-ROM from the resource manager to install:

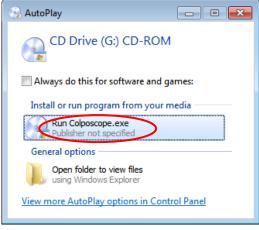


Figure 4

5) Click on the "Install Software" button to install the software (if the system is not installed NetFreamwork4.5, first pop up the.Net framework dialog box, please click OK to install):



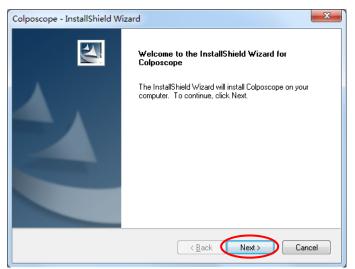


6) Click "install" (under window 8 system, please skip step 5-7 when installation):

Colposcop	e - InstallShield Wizard
<mark>ی</mark> ا	olposcope requires the following items to be installed on your computer. Click Install to egin installing these requirements.
Status	Requirement
Pending	Microsoft .NET Framework 4.5 Full
	Instal

Figure 6

7) Click "next":





8) Click "change...", and change the procedure installation access:

Colposcope	e - InstallShield Wizard	
	Destination Location older where setup will install files.	
	Install Colposcope to: C:\	Lhange
InstallShield -		<back next=""> Cancel</back>



9) select the installation path other than the C drive, click "OK":

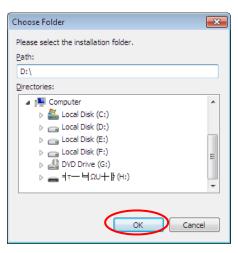


Figure 9

10) Click "Next":

Colposcope	- InstallShield Wizard	E
	Destination Location Ider where setup will install files.	12
	Install Colposcope to: D:\	Change
InstallShield –		< Back Next > Cancel



11) Click "Install"

colposcope - InstallShield Wi	2010		
Ready to Install the Program		L. L.	
The wizard is ready to begin insta	allation.	L	
Click Install to begin the installation	on.		
If you want to review or change a exit the wizard.	any of your installation	settings, click Back. Click (Cancel to
stallShield			
	< Back	Install	Cancel

Figure 11

12) In the following dialog box, click "installation", continue to wait for the installation.If "windows can't verify the publisher of the driver software", please choose "Always install the driver software":

Windows Security
Would you like to install this device software?
Name: Magewell Electronics Co., Ltd. (Nanjing, Publisher: Nanjing Universal Networks Co.,Ltd
Always trust software from "Nanjing Universal Networks Co.,Ltd".
You should only install driver software from publishers you trust. How can I decide which device software is safe to install?

Figure 12

13) Click "finish", After confirming the restart system, then the software installation is successful.

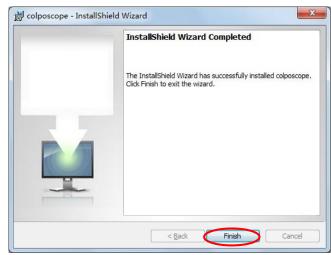


Figure 13

14) If it occurs an error, please install "Microsoft .NET Framework 4.5" manually.

Chapter 2 Software Operations

1. User login

Open the software, pop-up user login interface. For the first time using the software should be operated by the administrator, the system administrator account and initial password are "admin". The administrator can set up the account and password separately for ordinary users, and the ordinary users can use them after authorization. If you choose "remember me", the system will automatically remember each login account and password, but the function of the risk of being misused, please choose carefully:



Figure 1

The first time login, the system will prompt the administrator to modify the initial password. It is recommended to modify the initial password to ensure the security of the administrator account:

ask	
Please change the	initial password.
Cancel	ОК
🔲 No p	prompt next time.

Figure 2

If you do not want to change the initial password, and do not want to pop up the dialog box the next time when you log in, check "Do not prompt again" and click "Cancel". If you want to modify the initial password, click "OK" to modify, or in the "Software Settings" to modify.

2. Main interface

After user passed authentication , enter figure 1:

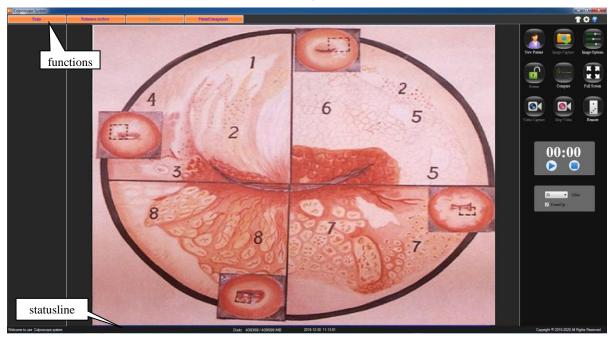


Figure 3

Introduction of the system interface:

• **T** skin replacement: Click this button, to change the system skin. Right-click the

button, can bring up the following interface.

Skin			×
		Save	
NavigationBar			
BackColor:			
NavigationButton			
BackColor:	ForeColor:		
OverColor:	ActiveColor:		
Main	ToolPanel		
BackColor:	BackColor:		
ForeColor:	ForeColor:		
ToolButton			
BackColor:	OverColor:		
ForeColor:	ActiveColor:		
StatusBar			
BackColor:	ForeColor:		

Figure 4

- System Settings: click on the button to enter the system settings interface.
- Welp button: Click the button to enter the system help interface. In the index, you can search by keyword. Press F1 in the current window, you can directly open the window corresponding to the help interface.
- Buttons for function page Here has four buttons for function page: Image gathering, atlas analysis, case-reporting, medical record management. The one-shot

enters the corresponding function contact surface.

- **Statusline** Demonstration current system's state:
 - > ID Demonstration current patient medical record number;
 - Mode Demonstrates the new patient pattern, the subsequent visit patient pattern, view mode;
 - > **Disk** to display storage capacity and total capacity
- Click the Exit button or the "ESC" button to exit the system,
- Click the button to minimize digital colposcopy system interface.

3. System Settings

If you use this system for the first time, click the "System Settings" button, open the System Settings form, and operate the software setup, hardware setup and user setup.

• Software settings

Open the "System Settings". click the "Software Settings" button:

100 -	Software Setup
	Hardware Setup
♥ ShowTime ♥ ShowDFT	User Setup
Colposcope System	
Name of Hospital	
Browse Print setup	
Default Save	
EN Close Screensaver	Ver: 1.0.2.0
	ShowTime ShowDFT Colposcope System Name of Hospital Name of Hospital Print setup Default Save



- **Total Imaging:** set the total number of the picture, choose from 10 to 100.
- Capture set: Can setup whether to display the date ,time and calculagraph time on capture picture
- > Report
 - ♦ Report name Uses for to fill in the report head.
 - ♦ Hospital name Hospital name which demonstrated in the report.
 - ✤ Hospital icon The default is a Cross icons. The user may choose other icons, click "browsing" for choose, click" default" back to default.
 - ♦ **Print setup** Uses for to establish printer's type and parameters.

Click the "Default" button to restore the default "Report Settings". After settings finished, to click "save" button.

- Language: select system language, "CN" is Chinese, "EN" is English, "ES" is Spanish, "RU" is Russian, "TR" is Turkish, "VN" is vietnamese.
- Close screensaver: When program run, it forbids to open the screen protection. chooses this item to prevent the screen protection to affects the observation.

• Hardware setup

Click "Hardware setup":

		×
Video Control:	Sony	Software Setup
		Hardware Setup
Pedal Video Response Time:	3	User Setup
Video source:	TW6802 PCI, Analog Capture (#01)	
CompressEncoder:	XviD MPEG-4 Codec	
Standard:	PAL_D	
VideoInput;	•	
VideoColor:	YUY2 - VideoSize: 768,576 -	
VideoSize:	Auto 👻	
Image Processing:	✓ DeInterlaced	
Video Properties:	Pro1 Pro2 Pro3	
		Ver: 1.0.2.0
1		

Figure 6

- > Video control: lens type settings.
- Pedal video response time: adjustment foot switch's sensitivity, 2-10 may select. Only press the foot switch time is longer than the set sensitivity, can respond to the video start or stop function.
- Other settings: For other setting options, system determines automatically according to the type of capture card, without user setting. Interfaces may have some differences according to capture type. If appearing image broken screen phenomenon, please modify the two options of Standard and videosize according to below table.

type of capture card	Bui	lt-in	USB	
Imaging device standard	NTSC	PAL	NTSC	PAL
Standard	NTSC_M	PAL_D	NTSC_M	PAL_D
videosize	640, 480	768, 576	640, 480	640, 480

Click "Pro2" in "Video Properties" is needed for optical colposcope, and then the following dialog box pops up. Please select "PowerLine Frequency" (50Hz or 60Hz) according to the local voltage frequency. Brightness, contrast, white balance and so on can also be set in this interface.

Capture Filter Properties			-		×		
Video Proc Amp Camera C	ontrol						
					Auto		
Brightness		0		10			
<u>C</u> ontrast		0		32			
Hue		0		0			
Saturation	,		00	15			
Sharpness	,	0		8			
<u>G</u> amma	0			0			
White Balance		0		128			
Backlight Comp	0			0			
<u>G</u> ain	0			0			
Color <u>E</u> nable	e	<u>P</u> owerLine Fr (An	equency ti Flicker)		•		
	Default						
	OK Cancel Apply						

Figure 7

• User setup

Administrators can add, modify, delete user information, ordinary users can only modify the password:

	ID	User Name:		Software Setup
•	1	admin	User Name:	Hardware Setup
*			*	
				User Setup
			Password:	
			*	
			Confirm Password:	
			*	
	Add	Modify	Delete Clear the	
				Ver: 1.0.2.0



Note: administrators need to keep in mind the password set, otherwise the system will not be used. If you forget your password, please contact our service department. For the first time, "old password" is "admin".

4. Images collection

The default interface is "Image collection". Or click in "Image collection":

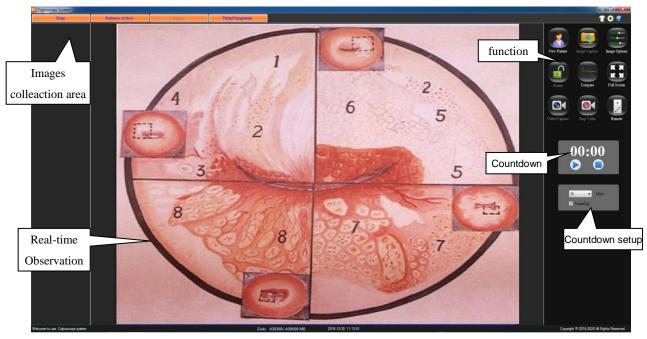


Figure 9

The function button introduce:



Clear current patient information, create new patient records. (Note: The medical records will not be cleared). Medical records must be created before the system can be used. Click the button ,it will prompt whether the record is new, as shown below:

ask		
	Whether the new	medical records?
	OK	Cancel



Click "OK" to fill out the basic information of the patient, also can not fill in any information, later in the "diagnostic report" fill in:

		×
		Confirm
Birthday:		
12/30/2016		Cancel
	·	·

Figure 11



Click this button to take pictures of the observed images, showing the images in capture area. Save an image for each click. Or press the foot switch for the same operation.

Clicks on this button, in the following interface, the display image can be altered. ("Whitebalance" of the optical colposcope can be adjusted in "Pro2" in "Video Properties")

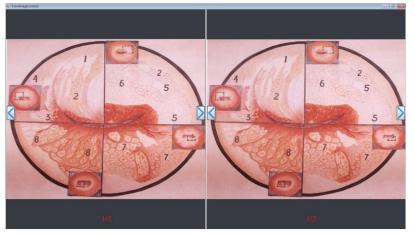
VideoAdjust			X
Light:	-	0	Reset
Contrast:	,		Reset
tonal	,	0	
saturation	-	0	
clarity			0
gamma	-		
whitebalance	0		
Backlight contrast	-		
gain	,		





Press this button, freeze the image, icon changes to "**D**", this time may carry on the static state to take the images, the image will be quite clear. Click this button to return.

Put the pictures together to compare. Click this button, presents the contrast surface, click the arrow to browse pictures.







Click this button, to make the observation image full-screen display.

Click this button, start record, "stop record" under the "stop record" appears Record Time. Long press the foot switch, you can start or stop recording. Collection of video and images displayed in the image collection area, double-click the file to open. You can also click on the file name to directly modify the file name.

Click this button to stop recording.

click the control button, springs the camera control interface, you can control camera's enlargement, reduction, far and near, the optical strong or weak, the white balanced as well as the video frequency pattern.

			8
Enlarge Reduce	🔲 BackLight	V AWB	Model
V Autofocus	Intensity Weak	R - Gain - +	 Normal BlackWhite
Far Near	AutoLight	B – Gain +	O Green

Figure 14

- **Reduce** Click on this button, may carry on the reduction to the observation image.
- Enlarge Click on this button, may carry on the enlargement to the observation image.
- AF choose this item, automatic focusing the image, black it, manual control.
- Far When manual focusing, carry out far focusing to the video.
- **Near** When manual focusing, carry out near focusing to the video.
- **backlight** Choose this item to open the backlight.
 - > weak Clicks on this button, may weaken the camera back light
 - > Intensity Clicks on this button, may strengthen the camera back light
 - Automatic Click this button to automatically adjust the camera's backlight intensity.
- **AWB:** Tick this, it will open the camera's automatic white balance calibration function.
- Model
 - > **Normal:** Normal show observation image.
 - > Gray : Will observe the image by the black-and-white image display
 - > Green: Will observe the image by the green image display.



Click the right key of the mouse, presents the edition, the browsing, the deletion, to delete all of the options, can carry on the corresponding operation to this image:

• **Browse:** click "browse", operate th enlargement, reduction, resume, save as.





• Edit : Click "edit", in this windows, can edit the negative image, turn over, filter, gradation, area computation, mark. After edition completes, click "save". If not, click "back".



Figure 16

- Delete: click this button to delete the images.
- Delete all: click this button to delete all of the images in the windows area.

Countdown: click "countdown", at the bottom of panel, pop-up "timer" .Set the timer time, 1 to 30 minutes is optional. Check the "timing display" is the timing, if not, it display countdown. click "D" button, The timer starts counting according to the set time, click "I" button, pause the timer, and click "I" button, stop the timer.

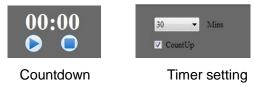
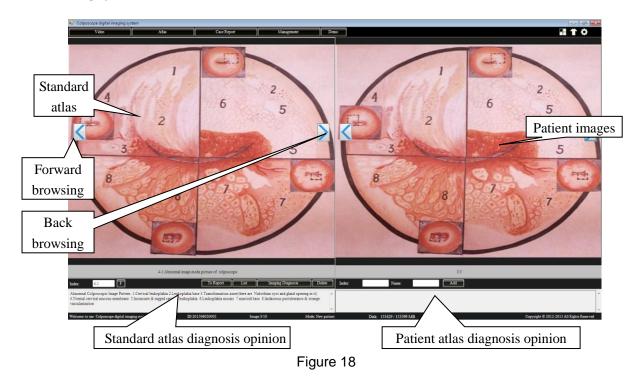


Figure 17

5. Atlas analysis

Click Atlas



The left area of the window is the standard atlas area, right one is the patient atlas area.175 kinds of standard atlases had been provided in the standard atlas area and the corresponding diagnosis opinions to make contras with the patient atlas and convenient to doctor's clinical diagnosis. Some clinical value patient atlas can be added to the standard atlas base data for rich the clinical experiences.

Function introduce:

Click "I forward browsing the atlas images; click" back browsing the altas images.



input altasNo.in the "Index" for searching.



Click this button, list up the standard altas list

4-1:Abnormal image mode picture of colposcope			
→ Abnormal image mode picture of colposcope → normal cervix → normal cervix1 → normal cervix2 → vaginal		Close	
adenosis of vagina adenosis of vagina1 adenosis of vagina2 adenosis of vagina3 adenosis of vagina3		Delete	



Click"+"of each item of the left side in tabulation to launch this tabulation, then choice numerator, assign out the corresponding standard atlas. Click" delete" may delete selects

the item. Click "close" to shutting down tabulation frame, returns to the normal pattern. NOTE: Only the user's self-definition altas can be deleted.

Imaging Diagnosis Click this button to add Standard atlas diagnosis opinion into Patient atlas diagnosis opinion and edit.



Add

Click this to delete Standard atlas images.

Input the patient's index, name and diagnosis opinions, add this patient standard altas into standard altas database.

6. diagnosis report

Click Case Report, enter diagnosis report :

Exam Referen	ce Anthree Repor	s Paiesóla	nagement								108
201612300003000.jpc		PrintID			of Hospital	201 Inspecti	612300001 ng date: 20161230		Buttons	N L	PDF
2/2		Name: LMP ;	S 201612:30 🗐 * A	en:	• Age; 0	Parity:	Tel;		Buttons		
201612300001001. jpg		PatientReportByThemselves; Cytologic result;	2010/12/30 (81. 14					0		Saving	Report
		Pathological NO.; HPV result:	P	athological result;				000		⊖ A4 A4-0 aml	
Con a con										- A4-1 mi - A4-2 mi - A4-3 mi	
201612300001002.jpc										A4-4.ml A4-6.ml	
O										Letter-0.xml Letter-1.xml Letter-2.xml Letter-2.xml Letter-4.xml Letter-6.xml B5 B5 B5-1.xml B5-2.xml	
Images										- B5-3.ml - B5-4.ml - B5-6.ml	
display area							-			Inch5-H and	
		RCI				Total:	Tissue			Custom	
		Margin: Color: Vasada: Jodine reaction:						Case	report edit		
		Colposcope display									
		Doctor's advice and treatm	ent			0	PO=Pelypus C=Cendylema				
		Absormal Colposcopic Ima are Nabothian cyst and glan Irukoplakia 6 Leukoplakia s	e Pattern .1.Cervical leul d opening in it) 4.Norm	al cervical mucous mer	mbrane 5 Incrassate & ru	gged cervical	L=Eukophikis W=Aceticacid white epidem P=Pointilized vein U=Untypical vein M=inlav	in .			
Welcome to use Colposcope system	ID: 201612300001	Mode: New patient	Disk: 40	9368 / 409599 MB	2016-12-30	11:44:41	In NEItration cancer			Copyright @ 2016	2020 All Rights Reserved

Figure 20

• Case report edit

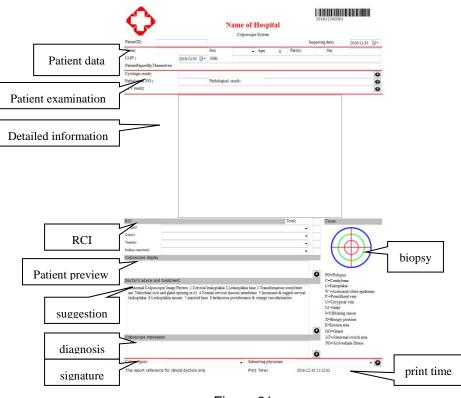


Figure 21

- > **Case information area**: the basic information of patient in the case area.
- Diagnosis opinions area: clicks this button, some corresponding dictionary data are appeared, add some common used words and phrases into the dictionary data, choose from it next time, no need to input any more.

Cytologic result:		lext
Pathological NO.:	Pathological result:	0
HPV result:		Ô



EX: click this button **(Solution)** in the right side of "cytology inspection", as Figure 19 shown.

FormWordEdit	
	InsertWord Update Delete
	ToReport 📃 Add

Figure 23

Input some common used terminology, click "insertword", may increase to left side "dictionary". select a certain term in dictionary to modify, click "Update", save the modified content. Lately use, directly select from the "dictionary", Click "to report" button, can insert this to the diagnosis opinion text box. Check "add", can continuously add to the report. Click "delete" button, can delete the selected words of dictionary.

- > **Detailed data:** Input detailed examination data of patient
- > RCI SCORE AREA: User could insert some related information about RCI.

Margin:	Total:	<u>и</u>
RCI Margin: Color: /essels:	•	
Vessels:	•	
Iodine reaction:	•	

Click" $\mathbf{\nabla}$ "in the right of the text frame, choose one, then the system will automatic offer the score; there will be a total score at last.

Biopsy Mark: click biopsy figure 0, user can note in the figure by left-click mouse.

FormImgEditHJPic			X
	 U=Untypical vein E=Erosion area I=Nfitrating cancer GO=Gland AT=Abnormal switch area M =Inlay X=Biospy position 	 P =Pointilized vein W =Aceticacid white epidermis PO=pPolypus C=Condyloma L=Eukoplakia PG=Activeshade illness Reload	

Figure 25

Uses can modify the mark type in this window, doing some related mark in the Biopsy mark. Click "reload" to clear and click "ok" to save.

- Doctor's signature: If it's the first time use report printing, you need to add doctor's name or the code numbers. Click this button "^①" to add doctor's informations, then you can directly choose from here "▼".
- Printing of Case report

Click " to preview the content and type of the case report. As Figure 5-22.

Mont preview State P → T T T T T T T T T T T T T T T T T T		Erge 10
	Name of Hospital Copump from Protein	
Printer button	Date te Apr 3 Paring Control of C	Content of case report
	RE Top Top Top	
	Biomain Anive Process Anive Process Anive	
	C Algoroport : Subsetting physical This report reference for chicar declars only Prot Time 2016-1330 1122 20	

Figure 26

<u>Recommendation:</u> Use high-quality inkjet paper to print a diagnostic report can improve the print quality.

• Case report

Click" Click to save the case report. If there is a case report No. same as this one, the system will notice "this case report already existed." so please make sure that avoid case report No. duplication. Call report from the "medical records management" for ordinary users, the report can not be modified, save.

Save as PDF format

Click 🗵 button, Save print report in PDF format.

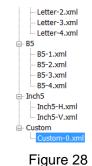
• Report type

Click this button a, the list as figure below appears. System will provide kinds of report sizes for user seletion. Click the left side "+", to expand the list, can choose the quantity of printing images in the report.

A4-1.	New
A4-2.	Edit
-A4-3.xm	1
A4-4.xm	1
etter	
Letter-0.x	ml
Letter-1.x	ml
Letter-2.x	ml
-Letter-3.x	ml
Letter-4.x	ml
5	
B5-1.xm1	
ich5	
Inch5-H.x	ml
– Inch5-V.x ustom	ml

Figure 27

new-built report type: right-click one report, can choose " new-built" report type, increase a "custom" type in the below:



edit report type: right-click new-built report, click "edit", the following interface appears, re-edit the report type, to increase or decrease the contains according to the requirement. (Administrators can edit all report formats, ordinary users can only modify their own custom format):

\wedge	Colposcope digital imaging s	ystem					
$\mathbf{\nabla}$	HoptialName	Inspecting date:	2015/02/2	28 💷	EdtModule	1	
Caselafo							U
CaseNO: Marital status:	Age: LMP: 2015/02/28 *	Name: Parity:			PatientDa	ita 📋 Check	🗆 Det
InspectingID:	Tet	Add			E Patientin		🖂 Biop
Clark				_	Report	C Other	
Cytologic mult:				0	C mpm		
Pathological NO :	Pathological result:			•			
HPV result:				•	DAMS		
					BaCode		
HCO	Sensal partners has condylona or	at:			reserved		
Smoking: •	Costraception method:		•		reserved		
Previous abnormal cytological smear:	- Reult	Date:	2015/03/07 [D•			
Previous organization biospy:	• Result:	Date:	2015/03/07	8.			
Cryotherapy history:	 Laser therapy history 						
Cancer family history:	 Other cancer history: 						
Nearest cytological smear:	Organization	himme			×		_
Histology:	Cervical scra	ping result:			Font	ForeColor BackColor	
					Dt		
		Tana					
Margin: Conversivence shape	о Плова и валооблимй этипарыне за продалани зоны пар-	nosa = 0					
Color:		•			PaperName		
Vensela:			(Δ)		Width	827	
Indice reaction	ятискориченного или интого(фенноное окрадивание)					1169 ÷	
	Tetal				Height	1109	

Figure 29

7. Case Management

Click "Management" to enter case management

Colposcope System					
Exam Refinence Archive Patient33 Rane	Reports PariestMar Age Phone A	der Sez Checkfine	BarCodo		101
Case data list			243.0	Function Condition setup	York Opended 2015 Work Opended 2015 Work York York Opended 2015 Work York York York York York York



Function introduce:



Click this to display the day of the case in the case data



Choose one case report from case data, click this button to add information to diagnosis report, can doing operations of re-examination.



To delete the case from list. (Note: This feature is only available to administrators.)



Choose one case report to view the details, and case report can be renewed and printed.(Note: doctor who can only view the doctor's own medical records, no right to view the other doctor's patient information. Administrator can view all the medical records.)



Click here to re-play the video.



In order to strengthen the security of case report, and to enhance the capacity of case data, the system provides the data backup function, you can output the record data in other ways or the storage medium. (Note: This feature is only available to administrators.) Clicks on this button, springs "backup" window:

DataBack 🛛]
DataOut	
Path StartDataOut	
DataIn Path I StartDataIn	



- Data output: choose the path, click start "output".
- Data input: choose the data you want input, and click "start input"
- NOTE: ----Do not save case record under system disk and installation file
 - ----- Do not doing other operations while you back up.
 - ——Data input will cover the existed data, please doing back up of the existed data.

Recommendation: ——backup the case once a month.

—backup whole year case each a year.

Case Guidance:

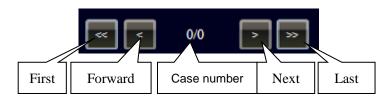


Figure 32

Case record search:

System can identify the case record by time, Patient ID, name, barcode (for products with barcode function) and birthday. Put in the matching information, click, start search, the result will display in the list.

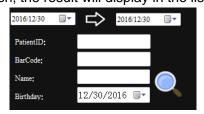


Figure 33

You can also click the date and time from calendar ,click "week" ,"month" ,"year" to search the data record, as Figure .



Figure 34